

Med.
Sotherton
St.
14-12.39

St. Bartholomew's Hospital



"Æquam memento rebus in arduis
Servare mentem."

— Horace, Book ii, Ode iii.

JOURNAL.

VOL. XLI. — No. 4.]

JANUARY 1ST, 1934.

PRICE NINEPENCE.

CALENDAR.

- Tues., Jan. 2.—Prof. Fraser and Prof. Gask on duty.
Fri., „ 5.—Lord Horder and Sir Charles Gordon-Watson on duty.
Sat., „ 6.—Rugby Match v. Harlequins. Home.
Association match v. Old Monovians. Home.
Hockey match v. Guy's Hospital. Home.
Mon., „ 8.—Special Subjects: Clinical Lecture by Dr. Cumberbatch.
Tues., „ 9.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Fri., „ 12.—Dr. Gow and Mr. Girling Ball on duty.
Sat., „ 13.—Rugby match v. O.M.T's. Away.
Association match v. Old Westminster. Home.
Hockey match v. Sevenoaks. Away.
Mon., „ 15.—Special Subjects: Clinical Lecture by Mr. Elmslie.
Tues., „ 16.—Dr. Graham and Mr. Roberts on duty.
Dramatic Society present *Bird in Hand* by Drinkwater, Jan. 16–19.
Wed., „ 17.—Surgery: Clinical Lecture by Sir Charles Gordon-Watson.
Fri., „ 19.—**Dance in Charterhouse Great Hall.**
Medicine: Clinical Lecture by Dr. Gow.
Prof. Fraser and Prof. Gask on duty.
Last day for receiving matter for the February issue of the Journal.
Sat., „ 20.—Rugby match v. Coventry. Home.
Association match v. Old Bradfieldians. Home.
Hockey match v. Harlesden. Away.
Mon., „ 22.—Special Subjects: Clinical Lecture by Mr. Just.
Tues., „ 23.—Lord Horder and Sir Charles Gordon-Watson on duty.
Wed., „ 24.—Surgery: Clinical Lecture by Mr. Harold Wilson.
Fri., „ 26.—Medicine: Clinical Lecture by Dr. Graham.
Dr. Hinds Howell and Mr. Harold Wilson on duty.
Sat., „ 27.—Rugby match v. Old Alleynians. Away.
Association match v. Balliol College, Oxford. Away.
Hockey match v. R.N. and M., Chatham. Home.
Mon., „ 29.—Special Subjects: Clinical Lecture by Mr. Rupert Scott.
Tues., „ 30.—Dr. Graham and Mr. Roberts on duty.
Wed., „ 31.—Hockey match v. Shoeburyness Garrison. Away.

EDITORIAL.



We wish all our readers a Happy and Prosperous New Year.

The general optimism which is felt throughout the country had its origin at this Hospital, where the prospect of establishing the new Medical College has filled all hearts with expectation.

The visit of H.R.H. The Prince of Wales, on December 8th, to the Charterhouse site was a fitting conclusion to the year which has passed with so much event.

On arrival the Prince was received at the entrance of the College by Lord Stanmore (President of the College and Treasurer of St. Bartholomew's Hospital), the Lord Mayor of London, the Vice-Chancellor of the University of London, Prof. Kettle (President of the Students' Union), Mr. Girling Ball (Dean of the Medical College), Mr. Stanhope Furber and Mr. J. G. Youngman (Secretaries of the Students' Union).

The Prince then made a tour of the buildings, and the suggested alterations were explained to him by the heads of the Departments.

(a) Anatomical Department:

Prof. Woollard, Professor of Anatomy.

Dr. Cunningham, Lecturer on Biology.

(b) Gymnasium and Fives Courts.

(c) Physics Department:

Prof. Hopwood, Professor of Physics.

(d) Chemistry Department:

Dr. Hurtley, Reader in Chemistry.

(e) Physiology Department:

Prof. Hartridge, Professor of Physiology.

Dr. Hamill, Lecturer on Pharmacology.

Students were stationed at intervals around the buildings in representative groups, and as the tour of inspection passed each group the Prince was given a mighty cheer.

After the inspection the Prince proceeded to the Great

Hall, where he was greeted by the Governors of the Hospital, members of the Staff, subscribers to the Fund, members of the City Companies and others.

The guests were received by Lord Horder (Chairman of the Publicity Committee and Senior Physician to the Hospital), Prof. Gask (Vice-President of the College and Senior Surgeon to the Hospital), Mr. Reginald Vick (Warden of the College).

Among those present were :

The Master of the Barbers' Company, J. O. Wakelin Barratt (Master of the Society of Apothecaries), Sir Harry Bird, Herbert Birkett (Master of the Ironmongers' Company), E. Blanford (Master of the Cordwainers' Company), Sir Alfred Bower, Sir George Broadbridge, H. A. Clegg (Assistant Editor, *B.M.J.*), Sir Herbert Cohen, Colonel Cecil Colvin, The Master of the Cutlers' Company, Prof. L. S. Dudgeon, W. McAdam Eccles, Equerry to H.R.H. the Prince of Wales, The Master of the Fanmakers' Company, Sir F. M. Fry, W. S. A. Griffith, Douglas Harmer, Sir Percival Hartley, Thomas Hayes, W. T. B. Hayter (Master of Charterhouse), Sheriff S. G. Joseph, Sir Frederick Keeble (Master of the Fruiterers' Company), The Editor of the *Lancet*, Colonel Alderman Lawn, Matron, Assistant Matron, F. H. Moore (Master of the Fletchers' Company), Sir George Newman, F. Newson-Smith (Master of the Turners' Company), Sir Louis Newton, The Rt. Rev. H. L. Paget, Stanley Palmer (Master of the Plaisterers' Company), Major A. Pam, J. G. Parker (Prime Warden of the Basketmakers' Company), Anthony Pickford (City Solicitor), Bryan Pontifex (Master of the Armourers and Brasiers' Company), Sir D'Arcy Power, L. Bathe Rawling, D. G. Richards (Town Clerk of Finsbury), The Master of the Shipwrights' Company, W. T. Holmes Spicer, Sir Bernard Spilsbury, Lord Stanmore, The Earl of Strafford, Sir Kynaston Studd (Master of the Merchant Taylors' Company), Councillor George Tripp (Mayor of Finsbury), H. B. Tuffill (Clerk to the Vintners' Company), Sir Hugh Turnbull (Commissioner of the City Police), Alderman Twyford, Sir Holburt Waring, Admiral Sir H. Watson, Sir George Wilkinson and Sir J. Leigh Wood.

COLLEGE APPEAL FUND.

The Dean's New Year Message.

"Bravo! The £50,000 mark in donations is passed!"

	£	s.	d.	
Staff	12,321	5	9	(71)
Demonstrators	1,524	11	0	(66)
Students	570	11	6	(276)
Old Bart.'s men :				†
Bedfordshire	10	10	6	(2)
Berkshire	86	1	0	(13)
Buckinghamshire	72	17	0	(12)
Cambridgeshire	165	14	0	(13)
Cheshire	1	1	0	(1)
Cornwall	22	2	0	(5)
Carried forward	£14,774	13	9	

	£	s.	d.	
Brought forward	14,774	13	9	
Cumberland	5	0	0	(1)
Derbyshire	19	14	0	(4)
Devonshire	541	19	0	(50)
Dorset	52	1	0	(14)
Durham	16	6	0	(3)
Essex	229	19	6	(17)
Gloucestershire	218	12	6	(20)
Hampshire	406	14	0	(38)
Herefordshire	13	3	0	(4)
Hertfordshire	73	0	0	(12)
Huntingdonshire				(1)
Isle of Wight	176	13	0	(11)
Kent	555	1	0	(63)
Lancashire	91	2	0	(11)
Leicestershire	133	12	0	(6)
Lincolnshire	47	6	0	(13)
Middlesex	382	3	0	(18)
Norfolk	159	7	6	(18)
Northamptonshire	54	4	0	(4)
Northumberland	101	1	0	(2)
Nottinghamshire	13	13	0	(2)
Oxfordshire	180	3	0	(17)
Rutland				(2)
Shropshire	35	9	0	(8)
Somersetshire	463	10	0	(26)
Staffordshire	194	18	0	(6)
Suffolk	263	1	0	(16)
Surrey	423	10	6	(43)
Sussex	265	1	0	(45)
Warwickshire	177	0	6	(17)
Westmorland	1	0	0	(1)
Wiltshire	97	11	0	(11)
Worcestershire	146	12	6	(19)
Yorkshire	268	2	6	(21)
Wales	43	1	0	(9)
London	2,575	6	8	(170)
Channel Islands	10	0	0	(1)
Scotland	14	4	0	(4)
Abroad	38	5	0	(7)
South Africa	326	10	6	(17)
Canada	113	2	6	(8)
East Africa	62	7	0	(6)
West Africa	146	10	0	(5)
India	152	0	0	(7)
Ceylon	4	0	0	(1)
Syria	2	2	0	(1)
U.S.A.	5	0	0	(1)
Ireland	14	14	0	(3)
North Africa	1	0	0	(1)
North Borneo	5	5	0	(1)
Australia	12	2	0	(3)
Egypt	4	2	0	(2)
Malay States	6	0	0	(2)
China	45	7	4	(7)
Siam	10	0	0	(1)
France	50	0	0	(1)
Trinidad	22	2	0	(2)
British West Indies	23	1	0	(3)
Kenya	10	0	0	(2)
New Zealand	2	1	0	(2)
Services	514	14	0	(33)
Others	25,907	6	1	(251)
	£50,701	7	4	

† Number of Bart.'s men in County.

We have been asked to announce that a Dance will be held in the Great Hall of the New Medical College on January 19th, 1934. Dancing will be from 8 p.m.—2 a.m., and there will be a running bar and buffet.

The proceeds will be given to the College Appeal Fund. Tickets may be obtained from Bridle or from the Committee (price 12/6 double, 7/6 single).

All are asked to support the occasion.

* * *

We have to offer our editorial congratulations to Dr. Finzi on being awarded the Mackenzie Davidson Medal for 1933.

Dr. Finzi is the first British radiologist who has received this honour, and his name is now linked with many famous international scientists who have been awarded this medal in the past.

* * *

We have to congratulate G. D. Kersley on being awarded the Raymond Horton-Smith prize in the University of Cambridge for his essay on "Fragilitas Ossium and Allied Conditions".

* * *

We have been asked to remind all fourth and subsequent year students of the Prize given by the British Medical Association for the best essay on "Describe Three Cases you have seen of Acute Intestinal Obstruction, Discussing Diagnosis and Treatment".

Details for the 1934 competition may be obtained from the issue of the *British Medical Journal* for December 2nd, 1933.

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We would ask our readers to remember the Annual Christmas Entertainment given by the Amateur Dramatic Society on January 16th-19th, as announced in our last issue.

* * *

ST. BARTHOLOMEW'S HOSPITAL CAMBRIDGE GRADUATES' MEDICAL CLUB.

The 53rd Annual Dinner of this Club was held at the Mayfair Hotel on Wednesday, November 15th.

Dr. W. Langdon Brown (Regius Professor of Physic at the University of Cambridge) was in the Chair. There were 110 members and guests present. After the loyal toast, the Chairman proposed the toast of "The Club".

He mentioned the loss that the Club had sustained by the deaths of Sir Walter Fletcher, whom he described as the greatest organizer of research, and of Dr. Waldo, the coroner—a Founder of the Club.

He gave the members a very interesting account of the changes which are to take place in the medical curriculum at Cambridge.

Dr. Donaldson proposed the toast of "The Guests", among whom were Sir Holburt Waring (President of the Royal College of Surgeons), Prof. Hey Groves, Dr. Ralph Noble (of Sydney), Mr. Rock Carling (Surgeon to the Westminster Hospital), and many others.

Sir Holburt Waring, in replying for the guests, described his early visits to the Club, which he has attended as a permanent guest for forty years. Dr. Noble also replied.

Mr. Foster Moore proposed the health of the Chairman in a humorous speech, and attributed Dr. Langdon Brown's present high office to the disappearance of a tin of salmon from a remote store on the Norfolk Broads. No one saw the point of the story, but it went down very well.

Dr. Langdon Brown, after his reply, proposed the health of the Secretaries of the Club—Dr. Henry Burroughes and Mr. Reginald Vick, who replied suitably.

The Dinner was a great success, and afterwards members adjourned to Dr. Morley Fletcher's house, where the usual entertainment was provided up to a late hour.

* * *

We learn that the Abernethian Society have been lucky enough to secure the promise of John Drinkwater to give the Mid-sessional Address on February 1st. The subject of his address will be announced later.

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As we go to press we are delighted to read in the New Year's Honours List of the conferment of the C.B.E. upon Mr. Thomas Hayes, Clerk to the Governors since 1905. We offer our heartiest congratulations.

ACKNOWLEDGMENTS.

The British Journal of Surgery—The Nursing Times—Charing Cross Hospital Gazette—Guy's Hospital Gazette—Magazine of the London Royal Free Hospital—Middlesex Hospital Journal—St. Mary's Hospital Gazette—St. Thomas's Hospital Gazette—The Student—University College Hospital Magazine—King's College Gazette—University of Toronto Medical Society Magazine—Clinical Journal—East African Medical Journal—The General Practitioner—The Hospital—Bulletins et Mémoires de la Société Médecine de Paris—L'Echo Médicale du Nord—The Medical Forum—The Medical Press and Circular—Medical Times and Long Island Medical Journal—Post-graduate Medical Journal—Reale Società Italiana D'Igiene—Revue Belge des Sciences Médicales—Archives Hospitalières.

THE 1933 XMAS OMNIBUS.

WE had bought the last of our Christmas presents, and with that delightful feeling of having finished a difficult task we suggested to each other—she and I—that we should do a show. Now shows on the Saturday before Christmas are stuffy affairs, so we thought—I thought—that a taste of the Ward shows would be just the thing. So along we came quite appropriately through the Casualty entrance, and on the covered slope there was, according to custom, a



THE RED NUCLEUS.

great array of advertisements. "Who's the peer?" she said, recognizing the coronet. "Oh, isn't it good? Just like his photograph," she said, as she always does just before I could answer. "Oh, look at *The Green Elephants*. It isn't going to be that sort of a show is it?" "That's good," I said, evading the invidious question, and pointing at Mr. Ball, M.F.H.: "What's that he's chasing?" "Huntin'—and that's a right kidney." She was not impressed with my knowledge of anatomy, but wanted to know what catheteria meant. "It's a sort of a—of a—sort of a—" "What's that lump in her neck?" "A goitre," I replied hastily and relieved; these women know by instinct, I suppose.

"Who's the coachman? Doesn't he look funny?" "Here he is again, and he's not funny; he's the Professor of Surgery. "Aren't professors of surgery ever funny?" she said, musing at *The Red Nucleus* poster. "I suppose Dr. Argyll-Robertson is the bone-setter." "We're getting late. Come on." And on the way I explained the true greatness of the red monk, but all in vain. "Oh, I suppose he's Rahere." This led, of course, to a lecture about 1123 and all that.

Sister Abernethy was, as usual, arranging with great care so that all her patients and guests could see; we were also arranged and saw well. *The Green Elephants* began their dress rehearsal naturally a trifle stickily with a rather drawling opening chorus and a crooning "Night and Day". Then, having given us the normal to compare with of "What are you going to do now?" they turned it into "A patient's lament". This was good; I wish I could remember the words. Then Messrs. Owen and Howell (who with Maidlow were the backbone of the show) recited all about things like Herr Hitler going into the synagogue. We laughed, but we laughed more at the "Atmospherics." We heard and saw by television the speakers from three stations giving us talks on minor ailments, travel, and the trams in Manchester; and shortly after we heard that "only the other day I saw a lady who was dressed in only . . . two feathers which were . . . above the rear light is t'nnumber of tram . . ." We switched off to see a car broken down on the Portsmouth Road. Although the sketch lacked polish, like the car, and although we were glad when the very real American had lunched in and returned from Portsmouth to find that fatuous kid and that pompous "Papa" were still teaching us higher mathematics, we had enjoyed it well.

When we arrived in Paget *The Flavine Pack*, or rather one of the hounds, had his ears pricked up listening to the wireless—the same sort of thing we had just come from. "Stainless Stephen," she exclaimed, clapping her hands with joy. It was good, and only the very attentive member of *The Flavine Pack* didn't laugh—wonder how he did it. Gilbert and Chorus then gave a magnificent rendering of "How an Englishman takes his exercise". The chorus was well drilled and the whole thing went with a swing. Just because we stopped laughing for one moment a couple of little sketchlets were whipped out of the bag to keep our sides aching. "Old White's whiskers" was great in more ways than one, and it taught us at least three things: where to find Mr. Underwood, where Mr. Ball gets his suture material from, and where we won't find the threepenny-piece Sister Waring lost. At the musical dinner that followed all the waiters had studied under the teachers of either Tauber, Anton Dolin, Bing Crosby, or of—

forgotten the name of some famous step dancer. As it is impossible to improve the food in the Catering Company we presume this is a hint in another direction. But even if they of the Catering Company could sing they couldn't dance as well. Milton Hayes was very good and true to life, or rather he was just like our local M.P.; but we do hope Mr. Gilbert won't really take up politics, even if he is good at them. The *Pack* rounded things off very well by setting us a problem for research. The men, judging by the noise, were, funnily enough, more interested in how a fly keeps its weight down than either the ladies or the nurses, but Mr.

Then suddenly the time changed to Act III in the present, only to be whipped back to the days of armour by a B.B.C. announcer, who gave a running commentary on the romance of a famous Baron, who, having been chased across squares 2, 4 and 7, was foully murdered in his banqueting hall—square 6. With the *Radio Times* we followed it exactly. It was only after the murder that they had the courage to ask, "Who's afraid of the big bad Baron?" Well, of course, no one was.

Magnificently dressed in white and blue *The Jolly Bodies* began, as we arrived in Waring, with loud and rousing music, coming from a brilliant pianist and two



THE FLAVINE PACK.

Gilbert's performance was so good he was forgiven at once.

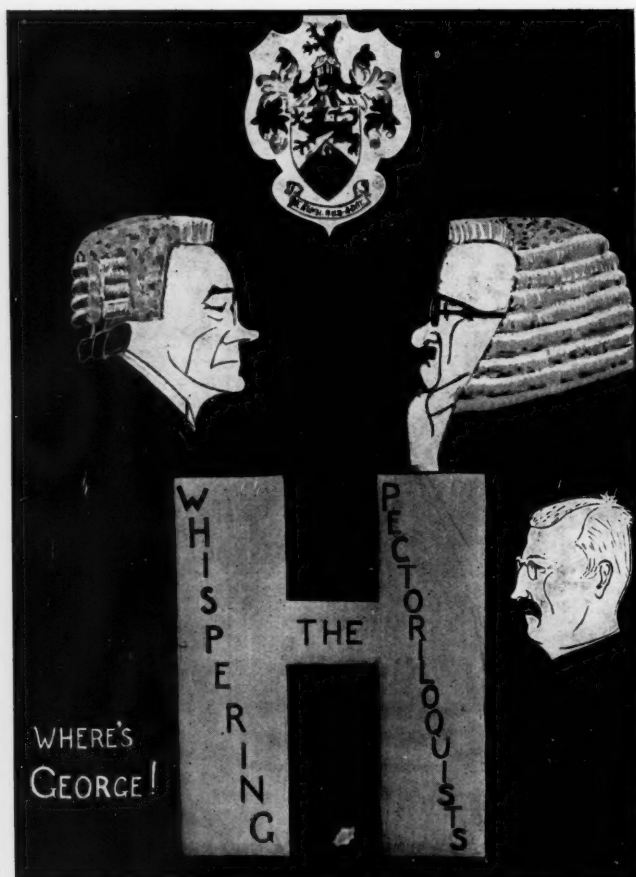
We returned on Christmas Day, neither of us having found out how a fly keeps its weight down, although it is true I had got a few ideas. Shortly after half-past one we found ourselves listening to *The Whispering Pectoriloquists*. This little patch of consolidation, localized in an inn, was in the form of a play—a pleasing and novel idea. The time of Act I of "Knights at an Inn" (any country inn) was the present, but soon we were taken back a hundred years to see yokels dressed in smocks enjoying, much as we enjoy now, a glass or more of ale. They sang tunelessly in their timbered inn, which stood up remarkably straight, and told us that their bonnies had gone over the water, and then four of them, still more tunelessly, told us how the poor maiden had to marry, even if the altar was her tomb.

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great piano accordions skilfully squeezed. A beautiful platinum blonde sang sweetly to us, sorrowing that the surgeon whom she loved so much could adore her only in pieces: she was perfect in all her parts, but undisintegrated, alas, she palled. After the inevitable Furber song, we were treated to a sketch in which a very pleasant young *locum tenens* (our Jack Hulbert) could gain neither the ear nor the confidence of the famous Mrs. Hamblett, a special sub-species of the outpatient genus re-discovered by Hinds Howell in its natural habitat. Our sides ached and eventually burst when we discovered she had shown the doctor the wrong arm.

It is extraordinary how lazy people are, even on Christmas Day, for as I went up the stairs to Ophthalmic the crowd got thinner and thinner, until at the top were left only the few who had come really to enjoy

themselves. However, at the top I found a dyspnoic old Bart.'s man and invited him to come and see *The Red Nucleus*. We were lucky enough to arrive in time to see the last half of *The Green Elephants*. They had not polished up their car, but their sketch was now good and we were sorry that damned American came back so quickly. He couldn't have been to Portsmouth possibly.



THE WHISPERING PECTORILOQUISTS.

"Happy days are here again" and so were the Nuclei. The plural is better, for although a co-ordinated mass, each preserved his individuality, and most of them played the part of centrosome as well—that is to say, they were spheres of attraction. In fact, as one charming little chromosome came away after seeing them for probably the fourth time I heard her say, hiding her admiration with unconcern, "They are getting a little better, aren't they?" "I suppose so," replied the other little chromosome, who was similarly affected. "D'ye ken John Peel?" had undergone metaplasia,

presumably as a response to environment—whether malignant or not judge for yourself.

CHORUS (after each verse).

Oh, we are the clerks and we clerk with glee,
We're a Nucleus Red, very bright you see.
If you don't feel gay, just attend Scheme B,
And we'll soon cheer you up in the morning.

VERSES.

Prosy peers are often portly; by their speeches we are lulled,
But there's one who's no Colossus and whose wits are not yet dulled.
At Lossiemouth this doctor's thought "the finest in the wurld",
And he's often in the papers in the morning.

When I had sinusitis, the crowds they flocked to see,
Mr. Bedford Russell shouted "Clear the Ethmoid Gallery"!
Then "Hold your nose, Now blow your nose, Now laugh and Now say 'Eee'",

And Coll. Alk. was all they gave me in the morning.

Now Dr. Geoffrey Evans is the Baron's better half,
For his style of bedside manner he's renowned upon the Staff,
Though once he stroked a parrot's tongue, Y'er know yer mustn't
ever laugh,

It's a thing I don't encourage in the morning.

Now if I have a surgeon to attend me when I'm sick,
I'd like a rosy-faced one, all very span and spick,
With curly hair and spotty tie. "Why, then send for Reggie Vick,
And he'll operate upon you in the morning."

"I'd like a spot of laughter, can you direct me, please,

To London's latest farces and brightest comedies?"

"Oh, save your cash", they answered, "try Morgan's S.O.P.'s,
And you won't be disappointed in the morning".

They bring to Dr. Harris ailing babies, thin and stout.

"Ah—right, just palpate liver, feel spleen, got any doubt?"

As you may readily imagine, it takes a bit of sorting out,
To guess the words omitted in the morning.

Have you heard Professor Fraser in accents soft and low?

Have you seen him lift his hammer to inflict a mighty blow?

Have you met Jack Hylton's namesake, from whom the Psalms
o'erflow?

If you haven't, come and join us in the morning.

The Dean is round collecting, his countenance is bright,

The total's slowly mounting up; his figure is not slight.

So send a New Year's present for the Merchant Taylor's Site,

And don't delay until to-morrow morning.

Dr. Hilton's ward round was well appreciated, but we were surprised to see him make a mistake, especially over a musical instrument; but then, perhaps, a concertina is not a musical instrument; at any rate, it is not a harp. We had thought that to err was human. The tongue-twister sketch, given by Jewesbury, Vartan and Turner was marvellous. After they had gone all the patients, nurses and even the Houseman were busy ordering "Two dozen double damask danner nipkins"; I mean "Two dizzen dable danner nipkins". No! No! "Two dapple dimask damn &\$/£ 3:-% &||o;?@@" The typewriter has also become confused.

"These *Naval Attaches* are good," said the old Bart.'s man, when he had recovered the breath he had lost laughing at the hornpipe which served as the opening chorus. The Dragon was especially expert, as indeed he was in the operation he performed later in that gem of song and dance called "Hæmorrhage in the Hold" or "Appendicitis at Sea". This was their big piece, and it was great. The operation was performed according to the technique of the Cambridge Medical Society.

The patient was anæsthetized without gas, ether or oxygen, and was placed on the table in the dorsal position by the use of a "tapper". The surgeon (Dragon) standing on the right side, tried to make an incision, but found the knife to be blunt. An incision of indefinite length was eventually made, using a two-handled saw (large pattern). The intestines—all of them—were delivered carefully through the wound. They were inspected by the surgeon and the dressers. The lesion was examined with song and dance. Prolonged and rhythmical traction was then applied, using the Volga technique. Meckel's diverticulum was seen to be discoloured brown. It was removed after inspection by the ship's dog. The appendix was not seen. As the effects of the anæsthetic were now rapidly wearing off, all hands were summoned on abdomen to replace the gut. The abdomen was closed in a different key, the various layers being sutured with No. 3 tarry twine, iodized silk being too fine for sailors. After a stormy convalescence the patient was able to join in the closing chorus.

When I got to Heath Harrison rather late for *The Harold's Harem* the second or third turn was on, but Mr. Wilson was still smiling over the opening chorus. It was so good they told me. But then they dressed themselves up as patients and showed him what he'd done. They asked him questions.

What d'yer want to look inside for,
What d'yer have me cut and tied for;
Look what you've done.
What d'yer let me have that gas for,
What d'yer stop me drinking Bass for.

Four slouching cads, slovenly dressed, then sang to us all about their caddishness. They were dreadful.

Their personal habits were filthy,
They often spat in the Square,
And that's why the fish in the Fountain
Are becoming increasingly rare.
The notes on their case-boards weren't lengthy,
And for clarity may not be famed;
They find a great pleasure to crib them at leisure,
From the notes that the Houseman has framed.

"Lively, what!" was breathed down my neck by the old Bart.'s man, who couldn't think of anything more appropriate to say about the very energetic *Rail Players* [not Payers]. Mr. Hadfield's gymnastic conducting undoubtedly set the standard. The sketch was a forensic perversion which showed an obvious Leopold Harris influence. The halting way in which it was played was, of course, due to lack of sympathy. Mr. Hosford, who joined the cast at short notice, read all his and some of the other parts with great skill. Mr. Leishman with his flute was as pleasing as was his singing of "Wof-f-f-f" in the song, "Who's afraid of the big bad wolf?"

However, the great feature of this show was that

superlative exhibit of the Loch Ness Monster. It had been captured on hook and line, perhaps with worm, by Mr. Wilson and Mr. Keynes (we were now in Bowlby) while on a holiday in Scotland. The papers had forgotten to tell us that it could not only sing but dance and even stand on its head, although a little unsteadily. P. C. Bielby, who was in charge of the case, had made special arrangements with Mr. Bertram Mills for its exhibition. He is keeping it in the Fountain over Christmas. So those large foot-prints (spoor) in the



THE DARK BLUE BIRDS.

Square were probably not Mr. Hosford's feet. Mr. Birdsall, like the rest of them, impoverished by the expense of the Monster, sang to his own accompaniment on a concertina and collected something of the £20,000 they owe to captors of Messrs. MacNess.

Yes, people are very lazy. There was far too small a crowd to see *The Blue Lights* give their most entertaining performance in Coborn, although one of their stars was to be seen wheeling himself—more often being wheeled—about in a chair. However, we are glad his foot is better. As if to explain away his absence, they began by explaining how the life of a dresser tells eventually upon the constitution.

Their best turn was a tea-party showing what would

happen if men took tea in the same way as women. They made it very amusing, but, of course, did not carry things too far, fortunately. The undies Mr. Barret knitted for Sir Charles Gordon-Watson are not to be on show unfortunately.

When a dresser's not engaged in his employment
Of scrubbing up his very dirty hands,
His capacity for innocent enjoyment
Is just as great as any other man's ;
His feelings he with difficulty smothers
When a Sunday morning dressing's to be done,
Ah, take one consideration with another,
A dresser's lot is not a happy one !

Though he loves to lie in bed on Sunday morning,
Or to take his little cousin to the Zoo,
Yet he comes to tend all those with wounds a-yawning,
Or to waken Beilby up in R.S.Q.
Though he might have gone a-golfing with his brother,
Yet he mournfully foregoes his week-end fun.
Ah, take one consideration with another,
A dresser's lot is not a happy one !

When Groves has got the day off for the Royal and Ancient game,
And his ball has gone a-zipping past the pin,
John Beilby and the dressers carry right on just the same,
And Sister Paget gives them nips of gin ;
And though Naunton's naughty stories pass around from one to
t'other,
And the nursing staff provide him lots of fun ;
Taking one consideration with another,
A dresser's lot is not a happy one !

Though Hosford comes to badger us on Wednesday afternoon,
The dresser never seems to turn a hair,
And though often he is made to look a fool,
For this he always has a perfect flair ;
And though Morgan hovers round us like a brother,
When Charlie's questions puzzle everyone ;
Taking one consideration with another,
A dresser's lot is not a happy one !

When Charlie's had a party but a day or two before,
A-plucking out a rectum like a plum,
And colostomies are lying all around us by the score,
And many feeling sore about the Tum ;
A dresser must subdue his irritation,
Shun all thoughts of lying basking in the sun,
And proceed with Carrel-Dakin irrigation ;
A dresser's lot is not a happy one !

They finished up solemnly with—

" Good-night patients
Good-night curtains ; hope you're hanging right".

Sister instinctively glanced at them. They were.

A few minutes later I was back in Abernethy waiting for the arrival of *The Dark Blue Birds*. They began well with a Joy Dispensary, from which they gave us a very potent draught of humour, the first effect of which was to make it appear as if we were listening to a telephone exchange. "I lend me a fiver," said a bankrupt. "Can't hear," persisted a man from the north. "But I can," said the Exchange. "Then you lend him the fiver." Among the other effects of this physic was to make us see and hear the Western Brothers singing in their own inimitable way ; but we believe the words were really composed by two Bart.'s students, perhaps Messrs. Salmon and Fearnley. Who

else knows what happens "when the Sister's away from the ward?"

The dressers come at half-past twelve instead of ten each day
In the ward when the Sister's away.
Probationers play hoopla with the air-rings so they say,
In the ward when the Sister's away.

There's the very sorry story of the dietician's cat,
It wandered through the Hospital, mewing in B flat,
For it had lost the way to Lizzie, and had kittens on the mat,
In the ward when the Sister's away.

Number 6, he had a joke that I thought rather fine,
He shouted it to Number 8, who happened to be mine,
And Number 7's temperature went up to 99,
In the ward when the Sister's away.

We had an actress in the ward, a masher so I'm told,
Her hair one week was red, and then the next week it was gold ;
It's her fifth appendicectomy—the first is five year's old ;
In the ward when the Sister's away.

Now Gask forgot to ask about the life of Percy Pott—amazing
whoopie !
In the ward when the Sister's away.
And a woman weighing twenty stone was put into a cot,
In the ward when the Sister's away.

We had a Smithfield porter in, his Christian name was Bob,
The anæsthetic made him rather sick after the job,
And all Sir Thomas Dunhill said was "Come on, can't you swab" ;
In the ward when the Sister's away.

An awful thing will come to pass in 1993,
There'll be sounds in Surgeon's only, "Whatever can it be" ?
It's the ghost of Aitken Walker who's come back to have his tea,
In the ward when the Sister's away.

Coming down to breakfast Ross trephined his egg,
In the ward when the Sister's away.
Sir Holburt used a tourniquet to amputate a leg,
In the ward when the Sister's away.

There's a very pretty typewriter owned by A. M. Boyd,
And all his leisure moments now in typing are employed,
His passion for the — instrument was analysed by Freud,
In the ward when the Sister's away.

Next was a long interlude, and we waited while the children's hour was broadcast. Uncle Stephen was very clever at making noises, and Oh, wasn't Auntie Angela lovely? Thank you, Auntie Angela ; we enjoyed it very much.

"Better shows than there were in my day. Yes. Quite a record Christmas you said—what—Quite believe it," and we walked out into the forsaken stillness of Smithfield Market.

SURGICAL APHORISMS.

(Continued from p. 47.)

69.



MORE extreme rigidity of the abdominal muscles is produced by a diaphragmatic pleurisy than by any catastrophe below the diaphragm. Above all, when the patient's nostrils are in labour and his respiration is accompanied by grunts, beware ! A laparotomy will reveal an unsullied peritoneum, and the anæsthetic will not have helped to resolve the basal pneumonia from which he is suffering.

70.

When perforation of a gastric ulcer has resulted in a hole more than half a centimetre wide, and the surrounding stomach wall is cheesy with inflammation, it is waste of time to attempt closure by sutures. A rubber catheter passed through the hole and down into the duodenum will serve both as a stopper and as a means of giving unlimited fluids. Lives will be saved in this way, which would be lost by conscientious orthodoxy.

71.

Chronic ulceration of the stomach may be attended by a slow loss of blood and a consequent anæmia. When the ulcer perforates, this anæmia is apt to be overlooked and the patient's low condition attributed to "shock". A blood transfusion will often greatly improve his condition and prospects.

72.

The routine performance of a gastro-enterostomy in the treatment of perforated duodenal ulcer is flying in the face of established facts. It may be dangerous, superfluous, or absolutely necessary according to individual circumstances.

73.

"Occult cancers ought not to be cured, for they that are cured die soon, whereas they that are not cured live longer" (Hippocrates, sect. 6, aph. 38). There is still much truth in this paradox, though it is too often forgotten. If it were too much regarded, some of the greatest triumphs of surgery would not be achieved, and it is in the subtle realm of judgment that the solution lies.

74.

A carcinoma of the stomach that is easily palpable is not necessarily inoperable. In any case the prognosis depends more on the age of the patient than on the size of the growth—the older the better.

75.

The association of a glass eye and an enlarged liver spells melanotic sarcoma, however long it may be since the eyeball was removed.

76.

It was at one time supposed that the use of so delicate and difficult an instrument as a cystoscope had, once and for all, marked out the genito-urinary tract as a province *par excellence* for the "specialist". It has since been discovered that familiarity with cystoscopy is easily acquired, and it is now part of the equipment of any competent surgeon.

77.

"Specialism" in the genito-urinary tract has had another respite since the introduction of transurethral prostatectomy, but it will be short-lived.

GEOFFREY KEYNES.

(To be continued.)

THE ASCHHEIM-ZONDEK REACTION.



HE Aschheim-Zondek reaction has gradually established itself, since its introduction by Aschheim and Zondek (1) in 1928, as the most accurate laboratory test for the diagnosis of early pregnancy. Together with modifications introduced by subsequent workers, it has superseded the older, unreliable biochemical tests.

The reaction—a biological one—depends on the presence of a substance in the urine of pregnant women, which will cause changes in the generative tract of sexually immature female mice. The important changes are ovarian, and consist of the formation of corpora lutea and of hæmorrhagic Graafian follicles.

It has been shown (Smith and Engle (2)) that the anterior lobe of the pituitary exercises a controlling influence on the ovary, and that changes in the ovaries of infantile mice similar to those produced by the substance in a urine of pregnancy may be caused by aqueous anterior lobe extract or by implantation of anterior pituitary tissue. In view of this, Aschheim and Zondek considered that the specific substance in the urine of pregnant women was anterior pituitary lobe hormone, the commencement of pregnancy being quickly followed by an "explosive production" of this hormone, resulting in inundation of the blood and excretion in the urine.

Various observers (Zondek (3), Wiesner and Crew (4)), have demonstrated that the anterior lobe hormone can be divided as regards its action on the ovary into two components—prolan A and prolan B (Zondek). Prolan A is concerned with maturation of the Graafian follicles, whereas prolan B is the luteinizing hormone. It is the latter which occurs in large amount in the urine of pregnancy, and is responsible for the specific criteria of a positive Aschheim-Zondek reaction, namely hæmorrhage into enlarged Graafian follicles and the formation of corpora lutea.

The original hypothesis of Aschheim and Zondek concerning prolan B has, however, been subjected to doubt by the observation (Reichert, Pencharz, Simpson, Meyer and Evans (5)) that the active substance in a

urine of pregnancy will no longer produce typical ovarian changes in sexually immature female rats, hypophysectomized prior to injection. The ovaries, to be responsive to the hormone in pregnant urine, must apparently be sensitized by the presence of the pituitary gland.

Whatever the explanation of the Aschheim-Zondek reaction may prove to be, its practical value as a reliable laboratory test for the diagnosis of pregnancy from an early stage is unaffected. The essential condition in the female for the urine to produce a positive reaction is the presence of living chorionic villi (physiological or pathological). The chorionic epithelium elaborates a substance which stimulates the anterior pituitary lobe with a resulting marked secretion of prolactin B, or alternatively its internal secretion is a hormone closely related in properties to the latter.

Uses of the test.—The test enables pregnancy to be diagnosed with certainty at a stage when its presence, as deduced clinically, may be inconclusive. Positive results are given as early as the week following the first missed menstrual period, and remain until parturition.

The recognition of early pregnancy is, of course, a matter of very great importance socially. In pathological states it may be absolutely essential for the patient's welfare to establish its presence or absence.

If pregnancy be contra-indicated owing to the presence of some constitutional complaint (heart disease, tuberculosis, diabetes, etc.), it can, by means of the Aschheim-Zondek test, be recognized at a very early stage, and terminated without the greater attendant risks at a later date.

Its value in confirming the suspected presence of an atypical ectopic gestation and in the differential diagnosis between an early pregnant uterus, a fibroid or an ovarian cyst, and between amenorrhœa due to pregnancy and that from other causes, *e.g.* the menopause, is obvious.

Lastly, as the essential for a positive test is the presence of living chorionic epithelium—physiological or pathological—and not necessarily a living foetus, the reaction is useful in cases of suspected hydatidiform mole or chorion-epithelioma. Both these conditions are characterized by an extremely high concentration of the luteinizing hormone in the urine, so that the reaction as ordinarily performed is intensely positive, or may be obtained by a single dose of a very minute quantity of urine. In hydatidiform mole, Aschheim (6) obtained a positive result with $\frac{1}{20}$ c.c., and Ehrhardt (7) with $\frac{1}{200}$ c.c. in one case and $\frac{1}{500}$ c.c. in another. Bishop (8), with the Friedman technique, obtained a doubtful positive reaction with the equivalent of $\frac{1}{300}$ c.c. of urine in a case of chorion-epithelioma.

According to Aschheim, the result may remain positive up to twelve days after the evacuation of a hydatidiform mole. Persistence of a positive reaction, especially with high dilutions of urine when performed after a much longer interval than this, or its reappearance after a negative period, should lead to the suspicion of the presence of chorion-epithelioma, and this in spite of negative diagnostic curettage.

Whether there is a quantitative increase in the strength of the reaction associated with the larger amount of chorionic tissue of twin pregnancies has not yet been investigated.

Technique and interpretation.—The method employed has been a slight modification of that introduced by Allan and Dickens (9). Five healthy, sexually immature female mice (21–24 days old at the beginning of the test, and of an average weight of 7.5 gm.) are given six doses of urine of 0.4 c.c. distributed as follows: Two on the first day (10 a.m. and 4 p.m.), three on the second (10 a.m., 2 p.m. and 6 p.m.), and one (10 a.m.) on the third. The times need be approximate only. The urine is injected subcutaneously under the skin of the back. The mice are killed on the morning of the fifth day, and their ovaries examined. A control animal was used in the earlier tests, but was subsequently found to be unnecessary.

The mice were procured from a commercial breeder, and were of the age stated (maturity is normally reached between five and six weeks after birth). Female mice can be distinguished as immature by the small size of the ovaries and their unripened follicles; also, the uterus is thread-like, and the vagina is a solid cord of cells.

A positive result is recognized macroscopically by the appearance of corpora lutea or hæmorrhagic Graafian follicles, or of both, in the ovaries. These show as small yellowish and as red dots respectively, with slight variation in size. The corpora lutea are more numerous than the hæmorrhagic follicles, but the latter are the more conspicuous. A hand lens ($\times 10$) is useful in the examination of the ovaries, but microscopic sections are not necessary. In addition, in a positive reaction the bi-cornuate uterus usually becomes enlarged and distended, and the vagina patent. These changes, however, depend on the presence of the æstrogenic hormone in the urine, which is increased in pregnancy (Zondek (10), Allan, Dickens, Dodds and Howitt (11)), and they do not form essential criteria of a positive Aschheim-Zondek result.

Five test animals are necessary, as individual mice vary in the degree to which they respond to a urine of pregnancy. The presence of corpora lutea without hæmorrhagic follicles is common, very rarely the

converse. The occurrence of either of these in one of the ten ovaries examined may be regarded as a positive result. In only two mice in the present series of 23 positive reactions did the ovaries show no changes (confirmed microscopically), and in one of these the absence was unilateral only.

Very rarely a covering of fat over the ovaries renders the detection of the distinctive changes somewhat difficult.

The urine used for the test should preferably be an early morning specimen, as the higher specific gravity (above 1015) present at this time is associated with an increased concentration of the luteinizing hormone. In the absence of leucorrhœa a catheter specimen is unnecessary.

The urine may be preserved by the addition of a few drops of toluene, and should be kept in the ice-chest during the test. Warming and centrifugalization, the latter reducing any mild degree of toxicity, are carried out prior to the daily inoculations.

Toxicity of urine.—Some urines prove toxic to mice, and cause death after one or two injections before the completion of the test. Slight decomposition results in a high mortality, but even in its absence, the urine may occasionally be found to be toxic. Toxicity is not related to luteinizing hormone content, and may be associated with a urine subsequently proved to be a non-pregnancy one. The frequency of toxic specimens, which kill the test animals, varies considerably with different observers; the Edinburgh station (12) reported their occurrence as nearly 3%, Ehrhardt (7) as 20%. At this hospital they have amounted to 6% of 50 cases tested.

A urine may affect the mice after the first one or two injections without causing death; in these circumstances if the result is not a matter of urgency, it may be possible by increasing the interval between the inoculations and prolonging the time of the test to a week or 8 days to keep the animals alive and obtain a result.

Two methods of detoxicating a urine are in use: one depends on the precipitation of protein with sulphosalicylic acid, and using the filtrate, which is adjusted to neutrality; the other consists in extraction of the urine by ether. The latter has been found to be the more satisfactory, and has been employed with success in the few severely toxic specimens met with in the present series of cases. The urine is well shaken up with approximately half its volume of pure ether, and the mixture placed in a separating funnel and allowed to stand. The urine is then run off from the supernatant ether layer, and any small residuum of ether allowed to evaporate by placing it in an evaporating dish in an incubator at 37° C. for a few hours. The urine so

treated is then used for the test in the usual way, and does not appear to suffer any loss of active principle. When only a small amount of urine is available (the minimum required for the test is about 15 c.c.), and a second specimen cannot be conveniently obtained, it is wise to extract the urine with ether as a routine before commencing the inoculations.

Difficulty caused by infection of the urinary tract may be overcome by using the blood-serum. Doses of 0.1 c.c. are given subcutaneously at the same times and intervals as for urine (Stewart (13)).

Reliability of the Test.

Aschheim (6), in over 600 cases comprising both non-pregnant and pregnant females, had a percentage error of 1.6%, Wiesner (14), at Edinburgh, one of 2.4%, and Allan and Dickens (9) approximately 2%. Stewart (13) in 101 tests had only one fallacious result, and Wittig (15) reports a 100% correct diagnoses. Robertson (16), in a general review of the work of a large number of observers, records a percentage error of a little below 1.5%.

It has been possible subsequently to confirm the result in 45 cases tested by the writer, and in these there have been no discrepancies.

It must be remembered that the reaction, as previously emphasized, depends on the presence of living chorionic epithelium; a positive reaction therefore is not necessarily proof of the presence of a foetus, and may be obtained with retained adherent fractions of living placenta, with incomplete abortion (where placental tissue is still present in a functional state), and with hydatidiform mole and chorion-epithelioma. Conversely, the result will be negative with a dead ovum.

The test becomes positive about the twenty-fifth day after conception, and remains so until about 48 hours after parturition. It remains positive as long as nine days after complete abortion, and for a longer period after the total evacuation of a hydatidiform mole.

The advent of abortion is accompanied by a diminution in the concentration of the luteinizing hormone in the urine during the previous two or three days (Wiesner (14)).

Some cases of pituitary disease may give a positive result (Bishop (8)), and a similar finding has been reported in a case of hyperthyroidism (Stewart (13)); it appears, therefore, that endocrine disturbance may be a source of error.

More disturbing is a weak positive result in a woman at the menopause (Allan and Dickens (9)); this, however, is contrary to the findings of almost all other

observers in this condition, and in three menopausal cases tested by the writer, the reaction was negative.

Careful interpretation of results, bearing in mind the essentials of a positive reaction (living chorionic tissue), knowledge of the anomalies regarding some time factors quoted above, and attention to details of technique (*e.g.* urine of high specific gravity) will probably lower the percentage error in the test to well below 1%.

Related tests.—Only two need be mentioned, the Siddall and the Friedman.

The Siddall test (17) consists in the inoculation of immature female mice with daily doses of 1 c.c. of the patient's blood-serum. On the sixth day the animal is killed and weighed; the uterus and the ovaries are dissected out cleanly, and also accurately weighed; the ratio of the mouse's weight to the combined weight of the uterus and ovaries is calculated, and this ratio is used for the diagnosis. If it is less than 400 to 1, the test is considered positive; if more than this, the test is negative. The reaction depends on the increased amount of oestrin in the blood of pregnant women. This test is not as accurate as that of Aschheim and Zondek, is more complicated, takes a day longer to perform, and needs blood instead of urine.

The Friedman test (18) is performed on a rabbit, and depends on the production of hæmorrhagic Graafian follicles in the ovaries by intravenous injection of urine of pregnancy; the principle is the same as in the Aschheim-Zondek reaction. In the rabbit, ovulation and the formation of corpora hæmorrhagica are said to occur only following copulation, so with adequate preliminary segregation mature animals may be used. The original technique consisted in the injection of 10 c.c. of urine into the ear vein of a female rabbit, killing the animal 24 hours later and examining the ovaries. This, of course, is a simpler method, and gives a much more rapid result than the Aschheim-Zondek test, and has tended to replace the latter, although in this form it is not so accurate.

Bishop (8), however, after an extensive investigation of the Friedman reaction, has shown that 36 hours should elapse between injection and inspection of the ovaries, and also that errors may result from the previous presence of old corpora hæmorrhagica in the ovaries, and from failure of an individual rabbit to react to a urine of pregnancy. To exclude these, it has been necessary to elaborate a more complicated technique. A preliminary laparotomy is performed on the test rabbit, and the ovaries examined to exclude old corpora hæmorrhagica. The abdomen is then closed and the intravenous injection of urine given. Laparotomy is carried out after an interval of at least 36 hours, and the ovaries re-inspected. The presence of corpora

hæmorrhagica indicates a positive result. If absent, the abdomen is again sewn up, and an injection of a known urine of pregnancy given. A third laparotomy is performed after a similar interval. If corpora hæmorrhagica are now present, the test on the original urine can safely be regarded as negative; if they are still absent, it is an indication that the rabbit is non-reactive, and the test must be repeated on another animal. This modification has so far given no incorrect result in 69 cases.

In view of Bishop's findings and the necessity for the above, it is doubtful if the Friedman test will displace the Aschheim-Zondek. The latter is simpler than this newer modified Friedman technique; provided the mice are 21–24 days old, there is no risk of hæmorrhagic follicles or corpora lutea being present prior to inoculation, and in addition the evidence from ten ovaries is available, thus allowing for variation in response of individual animals. The Friedman test gives a more rapid result, but it is possible to kill two out of the five mice in an Aschheim-Zondek test on the fourth day and find the conclusive positive changes in their ovaries.

Lastly, it has yet to be proved that the Friedman reaction, however modified, is more accurate than the Aschheim-Zondek; both depend on the presence of prolactin B in the urine, and both are theoretically open to the same anomalies.

CASES.

The following cases are drawn from the 45 confirmed tests forming the subject of this paper, and are illustrative of the value of the Aschheim-Zondek reaction in diagnosis.

1. Patient, æt. 46; married 7 months. Periods normal until two months ago, when flow scanty on first occasion, and then absent. (Differential diagnosis from menopause.) Aschheim-Zondek test performed two weeks after second period due—negative. Menopause subsequently confirmed.

2. Patient, æt. 23; unmarried. Missed one menstrual period; previously regular. Aschheim-Zondek test performed one week after first missed period—positive. (Early diagnosis of pregnancy.) Confirmed.

3. Patient, æt. 47. Ten weeks' amenorrhœa. Pregnancy five years previously associated with severe anæmia, pernicious in type; termination of any subsequent pregnancy advised. Aschheim-Zondek test, ten weeks after last period, positive. Preparations made to terminate the pregnancy artificially, but patient aborted spontaneously. (Confirmation of pregnancy, where constitutional factor indicates termination.)

4. Patient, æt. 37. A regular period was followed by one six days late; since the latter there had been slight continuous bleeding *per vaginam* for fourteen days up to admission to hospital, with occasional attacks of pain in the right iliac fossa. Examination revealed no definite signs of pregnancy. Bimanually, a firm, tender resistance was felt behind the cervix; this was considered to be the retroflexed body of the uterus, of average size. Apart from this nothing abnormal was detected in the pelvis. Aschheim-Zondek test performed four days after admission to hospital—positive. Operation revealed right tubal gestation. (Confirmation of suspected ectopic gestation.)

5. Patient, æt. 29. Last period commenced at expected date, but continued with slight loss and intermittent attacks of sharp pain in the right iliac fossa for seventeen days, at end of which time

patient was admitted to hospital. There were then no definite signs of pregnancy. Vaginal examination revealed an indefinite tenderness in the region of the right appendages and a structure resembling the right ovary could be felt. Aschheim-Zondek test was positive. Operation revealed right tubal gestation. (Confirmation of suspected ectopic gestation.)

6. Patient, æt. 39. Married twelve months. Ten weeks' amenorrhœa. Complained of abdominal swelling. Examination suggested ovarian cyst, rising to 1 in. above umbilicus; body of uterus soft and bulky. Aschheim-Zondek test positive. Patient miscarried third month, and a large pseudo-mucinous cystadenoma was removed three months later at operation. (Confirmation of pregnancy in presence of ovarian cyst.)

7. Patient, æt. 40. Symptom, abdominal pain. Periods regular until six weeks previously. Irregular bleeding since. On examination there were no definite signs of pregnancy; bimanually body of uterus was somewhat bulky, and projecting from its left posterior surface was a rounded mass 1½ in. in diameter. Aschheim-Zondek test negative. Operation: subtotal hysterectomy. Myometrium thickened and contained many areas of adenomyosis. (Differential diagnosis from threatened abortion.)

In conclusion my thanks are due to the staff of the Gynæcological and Obstetric Department, and to various doctors who have allowed me to investigate cases; to Mr. John Beattie in the former, for advice on clinical details, and lastly to Mr. E. Wilson, laboratory assistant, for help in the manipulation of the animals.

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H. F. BREWER.

CHONDROMATA OF THE LONG BONES.



HE clinician who profits by experience learns to regard a chondroma with disfavour, but it is exceptional for text-books of pathology to give more than the vaguest hint that this tumour can ever be anything but a harmless mass of cartilage. Even when it has been disseminated by the blood-stream the primary growth has been considered to be innocent, and the amazing suggestion that by virtue of their dense elastic consistency chondromata are not unlikely to ulcerate into veins is offered as an acceptable explanation of the phenomenon. It must be pointed out, in justice to the story-books, that the wisest of them warns the unwary student that such notions are to be regarded with "some suspicion".

It must be clearly understood that the tumours with which we are dealing have the characteristic naked-eye appearance of hyaline cartilage, and that no reference will be made to the osteogenic sarcoma having microscopic islets of cartilaginous tissue as one of its components.

The chondromata may be divided into two groups—one in which the tumours are multiple, and the other in which there is only a single growth.

MULTIPLE CHONDROMATA.

The cases in which numerous cartilaginous tumours arise in the long bones of the hands and feet are well known. These are named "enchondromata" since they form inside the bones and expand them. They may be present from birth, but if not observed, then they always manifest themselves in early childhood, and grow slowly until the bones become mere shells (St. B. H., A 495, A 499).*

Though the whole of a bone, including the epiphysal cartilage, may be involved, the tumours start in the shafts, and a considerable length of healthy bone may exist between the tumour mass and the epiphysal cartilage (St. B. H., A 501). The growth thus seems to start, not from an ectopic fragment of epiphysal cartilage, but from embryonic remnants of the primitive cartilaginous rods which form the bones of the hands and feet.

These tumours are sometimes found in association with deformities in the rest of the skeleton which have been attributed to rickets. That the misshapen long bones of the extremities are not rachitic is shown by the presence upon them of multiple cartilaginous

* Numbers refer to specimens in the Museums of St. Bartholomew's Hospital and the Royal College of Surgeons of England.

tumours, which could result only from a congenital defect in the developing bone, a deforming chondrodysplasia (R. C. S., 2157.2; St. B. H., A 497, A 502). This condition is closely allied to diaphysial aclasis (multiple exostoses), and there is no doubt that multiple enchondromata should be regarded as manifestations of a growth disorder of cartilage, as distinct from the chondroma of adult life, which is truly neoplastic.

Unfortunately the term "enchondroma" is often improperly used in reference to any cartilaginous tumour, and because the familiar enchondromata of the fingers are innocent, it is assumed that all other chondromata are innocent also.

SINGLE CHONDROMA.

The single chondroma of a long bone grows from a displaced fragment of the epiphysial cartilage, and therefore it always forms close to the end of the bone. Its natural history depends upon whether it continues to grow as a mass of cartilage, or whether it fulfils its proper function and turns into bone.

* Once upon a time there lived in an epiphysial cartilage a young cell, whose family, owing to bad housing conditions and overcrowding, were compelled to move further out into the country. His parents were kindly but old-fashioned folk, who believed that children should be seen but not heard, and the little cell from his infancy always did what was Right. It might have been of him the poet wrote:

"In eating Bread he made no Crumbs,
He was extremely fond of sums,
To which, however, he preferred
The Parsing of a Latin word."

When he left school and went into the City his conduct was governed by a burning desire to live his life in the service of his fellows. He therefore always had the exact fare ready, and made it a rule to let them off the car first and to move well up inside. He naturally gave his whole-hearted support to the suggestion that, as the family grew, they should turn their backs on their original home, from which they were now separated beyond recall, and that they should accept without demur their orthodox position overhanging the diaphysis.

Though he enjoyed being a cartilage cell, he noticed that everybody who was anybody sooner or later became differentiated, and so, in company with his friends and in accordance with the traditional behaviour of all self-respecting citizens, he sacrificed his individuality and became an undistinguished and even indistinguishable unit in a cancellous osteoma. One of his aunts who refused to mortify her family pride liked to hear them spoken of as an ossifying chondroma, but the rest of the family felt that as they had done their duty and turned into bone, why shouldn't they say so, and people rather admired them for it.

Having thus passed unblemished through tempestuous youth, this respectable community settled down to a peaceful unproductive adult existence, and if they did no good, they certainly did no harm.

The importance of the influence of early training is shown by the very different story of another family of cartilage cells placed in a similar environment. The parents believed that the little cells should be allowed to develop unchecked, and when they behaved particularly badly their conduct was excused, because, "after all, we were all chondroblasts once!" Never having been made to learn anything, least of all the classics, the bright young things

felt that this revelation about their origin would always "let them out", and they therefore determined to embark upon a career of crime. "Blast by name and blast by nature" became their slogan, and, joining the Communist party, they proceeded to undermine all the accepted principles of Law and Order.

They first ensured the rapid growth of their numbers by dispensing with all the old strait-laced notions about regular cell-division, and the handful of revivalists who exhorted them to differentiate and settle down were immediately overwhelmed by agitators extolling young blood and enthusiasm. It soon became apparent that they would have to enlarge their territory, and this they did by destroying the neighbouring bone and by growing outwards from its surface. They still refused to differentiate, and in the mass they resembled cartilage, though here and there in the poorer districts there were outbreaks of myxomatous degeneration and calcification.

The surrounding tissues maintained a stout resistance, and the barrier between them and the rapidly growing mass of young and misgoverned cartilage was yet intact, though it seemed doubtful how long they could hold out. At this juncture, however, an unforeseen catastrophe destroyed at one fell swoop almost the entire mass of cartilage. Though the forces of Law and Order were armed only with such primitive weapons as knives and sharp spoons, their commander was bloodthirsty and relentless, and the operation was so thoroughly carried out that it was thought for a time that none of the rebels had survived.

A few of the most vigorous young cells who had dug themselves into the surface of the bone had, in fact, escaped, and without delay they re-established themselves on more bolshy and blasty lines than ever, encouraging their followers to become as like their comrades, the sarcomata, as they could. Not content with local wrecking and destruction, groups of them set out to found anarchist societies in places where they would be more likely to succeed in undermining the authority of constitutional government. Many of these pioneers perished, but others became flourishing metastases, sapping the resources of their neighbourhood and finally achieving the dissolution of the entire body politic.

* * *

The moral is that unless cartilage cells are properly brought up, and unless they agree to do their duty and differentiate when they come to years of discretion, the Destroyer will do well to see to it that they are completely extirpated.

(i) Cancellous Osteoma.

If the ectopic cartilage becomes ossified, the familiar cancellous osteoma is produced, which always behaves as an innocent tumour, and provided the whole of its cartilaginous covering is removed, the tumour does not recur after operation, even though a portion of its bony pedicle be left behind. Seeing that it is composed almost entirely of bone the tumour is appropriately named a cancellous osteoma, the term "ossifying chondroma" being either discarded or applied to cartilaginous tumours, which have small areas of ossification occurring in them as a secondary change.

For this reason it might be more correct to leave the cancellous osteoma out of consideration, but it is included because of its clear relationship to the chondromata of epiphysial cartilage, and because, when compared with the latter, it gives strong support to the view that in their mode of growth the most innocent tumours resemble most closely the normal tissues of the body.

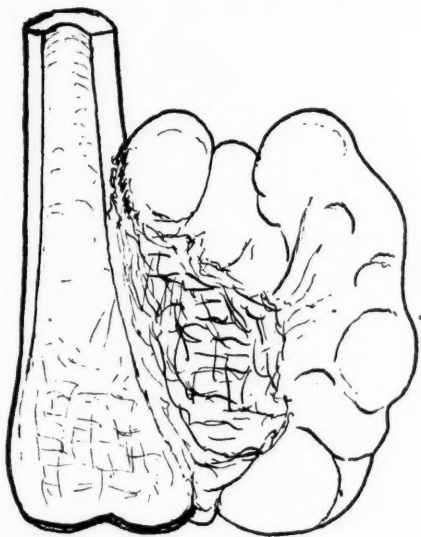
In common with all the tumours derived from epiphysial cartilage, the cancellous osteoma has been supposed to be a sequela of rickets. In the course of the irregular ossification which occurs at a rickety

* The paragraphs in small print are hard stuff, and are intended for advanced students only.

epiphysis islets of cartilage may be left high and dry, but there is no evidence that such islets ever develop into tumours. I have been unable to find the record of a case of rickets complicated by a chondroma, and the tumours which I have examined clinically and in museums have all occurred in bones which have been free from rickety deformity.

(ii) *Chondroma.*

A chondroma derived from epiphyseal cartilage may start growing outside or inside the bone. The tumour which grows outside is sometimes referred to as an



A. 620.

FIG. 1.—SPECIMEN REMOVED FROM A MAN, *ÆT.* 31. THE CHONDROMA HAD BEEN GROWING FOR TWELVE YEARS AND PORTIONS OF IT HAD BECOME OSSIFIED. THE HISTOLOGICAL EXAMINATION WAS “NOT CONCLUSIVE OF MALIGNANCY”, BUT TWO YEARS LATER THERE WERE EXTENSIVE DEPOSITS IN THE PELVIC LYMPHATIC GLANDS. [St. B. H., A 620.]

enchondroma, but as the term is likely to be confused with “enchondroses” (the chondrophytic lipping of the articular cartilage in osteoarthritis), it is perhaps preferable to call the tumour a parosteal chondroma.

When the growth starts inside the bone it may be spoken of as an enchondroma, but as it grows it erodes the bone, breaks through the cortex, and continues to grow outside. Hence the term “enchondroma” also may lead to confusion, and it is really more sensible to drop the prefixes and call them all chondromata.

(a) *Starting Outside the Bone* (Fig. 1).

This tumour appears in adult life and grows comparatively slowly for several years. Its outer surface is lobulated and smooth, with a clear line of cleavage

between the growth and the surrounding muscles. The surface in contact with the bone, however, shows no such clear-cut edge, and the cartilage and bone appear to be fused together (St. B. H., A 496, A 1614, A 620).

If an attempt be made to remove such a tumour from the surface of the bone, recurrence is inevitable, and whereas the original growth may be indistinguishable from simple hyaline cartilage, the recurrence will show features which are unmistakably those of a sarcoma (St. B. H., A 614, A 618).

Myxomatous and calcareous degeneration are common, and, though it consists almost entirely of undifferentiated

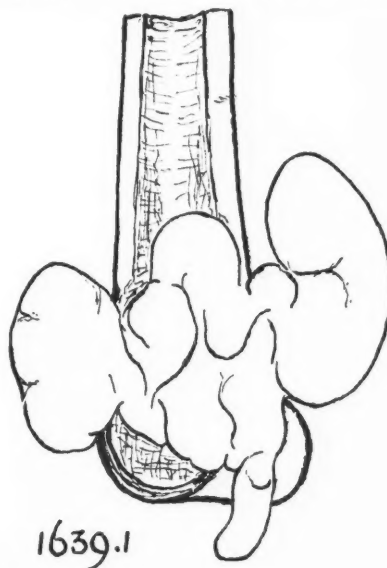


FIG. 2.—SPECIMEN REMOVED FROM A WOMAN, *ÆT.* 30. THERE HAD BEEN A SWELLING AT THE LOWER END OF THE FEMUR FOR THREE MONTHS. TO THE NAKED EYE THE LUMEN APPEARED TO CONSIST OF HYALINE CARTILAGE. DEATH ENSUED FOUR YEARS LATER FROM A SARCOMATOUS GROWTH IN THE BRAIN. [R. C. S. MUSEUM, 1639.1.]

cartilage, portions of the tumour may undergo irregular ossification (St. B. H., A 620).

The appearance of metastases completes the chain of evidence that these tumours are malignant, and though it may be that they “become” malignant, it is much more likely that they are essentially malignant from the beginning. Secondary deposits are recorded in the brain, kidneys and lungs (St. B. H., A 618) and also in lymphatic glands (St. B. H., A 620).

(b) *Starting Inside the Bone* (Fig. 2).

A chondroma in this position is a tumour of adult life, though it can occur in childhood (St. B. H., A 494). It increases in size rapidly, and, in contradistinction to the parosteal variety, the duration of symptoms is commonly a few months instead of a few years. As the

tumour grows it destroys the bone, and does not give rise to the expansion which is characteristic of the benign giant-cell tumour.

The radiogram of a chondroma may show streaks of calcification which resemble trabeculation, but the absence of expansion of the bone and the presence of a remnant of normal bone which is usually visible between the tumour and the neighbouring articular cartilage are features which help to distinguish a chondroma from a benign giant-cell tumour.

After destroying the cortex of the bone the chondroma sprouts out among the surrounding muscles, but its surface remains smooth, and though it infiltrates the bone, it does not appear to infiltrate the surrounding tissues (St. B. H., A 617). To the naked eye the only difference between such a chondroma and a mass of normal cartilage may be its vascularity (St. B. H., A 495A).

The appearance of metastases may be delayed for many years after radical removal of the tumour, and two specimens in the Museum of the Royal College of Surgeons (R. C. S., 1639.1 and 1639.5) were obtained from patients who died of secondary deposits four years after amputation.

It is important to note that a single chondroma may grow at the epiphysal end of one of the long bones of the hands or feet in adult life, and that such a tumour can behave in exactly the same way as a chondroma of one of the long bones of the limbs.

CONCLUSIONS.

1. "Multiple enchondromata" of the long bones of the hands and feet which occur in early childhood are innocent growth disorders of cartilage.
2. The only innocent tumour derived from epiphysal cartilage in adult life is the cancellous osteoma.
3. The chondroma which grows at the end of a long bone in adult life is malignant, growth being more rapid when the tumour originates within the bone.

J. PATERSON ROSS.

A PAROSTEAL CHONDROMA OF A PHALANX.

THE patient, a woollen warehouseman, *æt.* 29, ten years ago noticed a small swelling on the palmar aspect of his left ring finger in the region of the middle phalanx. At this time the swelling was quite painless, except when he gripped objects tightly with his hand, or when very firm pressure was applied.

At first this did not inconvenience him much, but it gradually grew in size, and it started to interfere with the movements of the finger. Examination revealed a firm fusiform swelling 2.5 cm. long, attached to the volar surface of the middle phalanx, but not attached to the skin, and on account of its size there was only a slight degree of flexion at the first interphalangeal joint. It was also found to be slightly tender on pressure.

The finger was X-rayed, and showed an area of erosion on the volar surface of the lower end of the middle phalanx, and over this a circular opacity, whose outer edge was definitely more opaque than the centre.



FIG. 1.—SKIAGRAM OF FINGER, TAKEN IN 1927, SHOWING IRREGULARITY IN OUTLINE OF THE VOLAR ASPECT OF THE MIDDLE PHALANX AND FAINT CALCIFICATION IN HUMOUR.

Throughout the centre were some very small areas of greater density. This gave the appearance of an ossifying chondroma.

Clinically the swelling appeared to be a new-growth, either of cartilage or fibrous tissue from the middle phalanx, and he was advised to have it removed. It was not until three years afterwards, however, that the patient came up to the hospital to have the swelling examined again. In the meantime it had increased slightly in size.

The finger was X-rayed again in 1927 (Fig. 1), and this showed that the condition was slightly more advanced than when the previous films were taken. The joint space between the proximal and middle phalanx had decreased, and lying in front of this was a rounded discrete swelling which was associated with

the bone, and whose edges were faint. A large area of erosion of the middle phalanx was seen.

Six months later he was admitted to the hospital to have the swelling removed. It was then 3 cm. long by 1.8 cm. broad by 1.8 cm. deep. The skin over it was stretched and smooth. It was hard and elastic, and only tender on strong pressure. The surface was rounded, and the edges were smooth and faded into the bone of the phalanx. The movements of the proximal interphalangeal joint were limited.

At the operation the tumour was found to be attached to the middle phalanx. The tumour was removed, and the surface of the bone was scraped with a sharp spoon.



FIG. 2.—SKIAGRAM OF FINGER, TAKEN IN OCTOBER, 1933, SHOWING FURTHER EROSION OF THE BONE AND MORE DIFFUSE OSSIFICATION IN THE HUMOUR.

It was shown pathologically that the tumour resembled the structure of a chondroma and a diagnosis of "enchondroma" was made.

After the operation the patient used his finger quite normally for five and a half years, when he noticed another swelling appearing in the same place. This gradually got larger, and during the last three months before coming up to hospital it increased rapidly in size. When he was examined in October, 1933, the swelling was found overlying the middle phalanx and distal part of the proximal phalanx. It was 2.5 cm. long by 2 cm. broad. In outline it was quite definite distally but less so proximally. The surface was irregular, and in consistency it was firm and elastic, being attached to the underlying phalanx but not to the skin. The size

of the swelling limited flexion of the proximal interphalangeal joint to some extent. It was only found to be painful on deep pressure.

This time the X-ray (Fig. 2) showed that the base of the middle phalanx had on its volar aspect a tumour with a thin bony shell and a relatively translucent interior which probably contained cartilage. Some irregular bone formation had occurred in the interior, and the tumour appeared to be fixed also to the head of the proximal phalanx. This was diagnosed by the radiologists as an "enchondroma".



FIG. 3.—THE AMPUTATED FINGER, SHOWING THE VASCULAR CHONDROMA SPRINGING FROM THE VOLAR ASPECT OF THE MIDDLE PHALANX.

Owing to the recurrence of the swelling amputation of the finger was advised, and this was performed. When the specimen was examined pathologically it was found on section that there was a pinkish vascular cartilaginous mass, 2.5 cm. by 1.3 cm., present over the proximal half of the middle phalanx and first interphalangeal joint (Fig. 3). This was firmly attached to the volar surface of the middle phalanx, and the phalanx itself appeared slightly hollowed out. The tumour had no capsule, and it appeared to be pushing the flexor tendons away from the bone without being attached to them. The proximal interphalangeal joint had not been invaded, and there was no attachment to the distal part of the first phalanx.

The microscopical section showed that the tumour was composed of cartilage cells lying in a hyaline matrix. In places a myxomatous change was occurring, also it was noticed that there were many blood-vessels present. The tumour was lying on bone, which it had eroded in places, but in other places this had gone on further, and there were seen small islands of bone lamellæ completely surrounded by the tumour.

The tumour therefore had the appearance of a parosteal chondro-sarcoma, which had grown from the epiphysal cartilage of the middle phalanx, and was infiltrating the bone. It is almost certain that infiltration must have occurred before the first operation, and it must be concluded that the only way to remove such a tumour completely is to excise the portion of the bone with which it is in contact.

I am indebted to Prof. Gask for permission to publish this case.

L. HEASMAN.

A RARE COMPLICATION OF FEMORAL HERNIA.



MS. H—, æt. 50, had enjoyed good health until August 28th, 1933, when she was admitted to the Hospital complaining of a swelling in the right groin. She stated that four days previously she accidentally noticed the swelling; it was not painful, and caused her no discomfort. There had been no history of vomiting or of constipation.

On admission her temperature was 99.4° F., pulse 78, respirations 18. The physical examination was negative except for the presence of the swelling in the right groin. This was oval, 3½ in. by 2 in., lying below Poupart's ligament and lateral to the pubic spine over the site of the femoral ring. It was of firm consistency, irreducible, and no impulse on coughing could be elicited. On pressure the mass was slightly tender. A diagnosis of irreducible right femoral hernia was made.

The low operation for radical cure was performed by Mr. Girling Ball. On opening the hernial sac, which was swollen and œdematous, it was found to contain serous fluid, which was slightly blood-stained. The finger, introduced into the sac, felt a nipple-like body projecting downwards through the neck, and this was found to be the vermiform appendix and its mesentery. Numerous adhesions were present, and the organ deeply congested. The appendix was freed, drawn down into the sac and removed. The stump was invaginated by a purse-string suture. The femoral ring was so tight

that it would scarcely admit the tip of the little finger. The sac was transfixed, ligatured and cut away, and two sutures were passed through the pectineal fascia and Poupart's ligament, obliterating the femoral ring. Recovery was uninterrupted.

The specimen removed consisted of the vermiform appendix and fatty meso-appendix. It measured 4.5 cm. in length, and appeared congested throughout. The lumen was patent in the entire length, and contained no concretions.

The consideration of the above case, when compared with a series recorded in the literature on the subject, emphasizes the complete absence of all the features suggesting involvement of the appendix. While this case is not unique, involvement of the appendix in a femoral hernia is extremely infrequent. Alti (1), in his thesis in 1894, gives an excellent account of hernia of the appendix. He discusses cases of strangulation of the appendix in a femoral hernia reported by Schwartz (2), Pollosson (3) and Brieger (4). Brieger reviews all the cases reported from 1868 up to 1893. During these twenty-five years he found there were but 15 cases of hernia of the appendix alone in a femoral sac, and in 10 cases there were symptoms of strangulation, in some of which the appendix was gangrenous. In 1911 Paul Oliver (5), of Chicago, reported a case of strangulation of the appendix alone in a femoral hernia. There was only one case reported by Downes during 1915, and no cases observed during 1916.

The case reported in 1915 by Downes (6) was that of an unmarried woman, æt. 28, a seamstress, who for the past four and a half years had noticed a lump in the right groin, which would make its appearance about once each month, and after remaining for a day or two would disappear spontaneously. Upon such occasions it was very painful, but gave rise to no other symptoms. On November 1st, 1914, the lump appeared as usual, without apparent cause. It was very painful, and failed to disappear as on former occasions. There had been no fever and no vomiting, and the patient had not remained in bed.

A high operation for femoral hernia was performed, and it was found that the appendix passed into the sac, only about ½ in. coming into view. No effort was made to draw the appendix through the femoral opening. It was divided at the base, and the stump invaginated. The neck of the sac was completely divided and ligated; the intact sac with the appendix was removed from below. The hardened sac, opened ten days later, showed the distal half of the appendix completely gangrenous.

In 1906 Heaton (G.) (7) removed a vermiform appendix from the sac of a femoral hernia. The patient, a

woman, æt. 55, had been seized with violent abdominal pain with vomiting three days previously. Soon after the onset of her symptoms diarrhœa set in, and continued at intervals until her admission to hospital. She had had a small hernia on the right side for many years. On admission she had an irreducible right femoral hernia, and a diagnosis of strangulation of a portion of the omentum or of a Meckel's diverticulum was suggested.

At the operation the sac was found to be full of offensive, blood-stained serum. The vermiform appendix with some omentum was strangulated at the femoral ring. The opening was enlarged, a portion of cæcum drawn down into the sac, the appendix was amputated and the stump invaginated. She made an uninterrupted recovery.

In 1918 Redwood (8) describes a further case. Mrs. D—, æt. 45, had a lump in the right groin for ten years, and had had attacks of "inflammation" in it about twice each year, usually brought on by extra work. The attacks lasted about a week, during which time the lump would become larger and painful. She was admitted to hospital on January 23rd, 1918. The lump was evidently a femoral hernia; it was large, tense and tender. There was no vomiting.

At operation the sac was found to be full of fluid, and to contain about 4 in. of appendix with its mesentery, the terminal 1 in. being doubled on itself. This portion of the appendix was crushed and removed. In view of the patient's general condition it was deemed inadvisable to prolong the operation by removing the whole of the appendix. Recovery was uneventful.

Two cases recorded in 1903 are of interest. In one, described by Fischer (9), the appendix and a portion of the cæcum were both found in the sac of a right femoral hernia. The second, recorded by Edington (10), was that of a female patient, æt. 52, who had enjoyed good health until five days before, when she noticed a painful swelling in the right groin. There was neither vomiting nor constipation. At operation the sac was exposed by a vertical incision, and on opening it a quantity of blood-stained fluid escaped. The appendix was found within the sac, and was drawn down and removed. It was found to be gangrenous. Recovery was uninterrupted.

In reviewing the above cases of the vermiform appendix in the sac of a femoral hernia, the striking feature is the uncertainty of the signs and symptoms that are produced. In some, though a gangrenous appendix was found in the sac, no symptoms or signs, save a fairly tender swelling in the right groin, were present, whilst in others the full evidence of intestinal strangulation was there. In none of the cases was appendicitis suspected or indicated.

My thanks are due to Mr. W. Girling Ball for permission to publish this case.

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- (3) "Etranglement herniaire de l'appendice iléo-cæcal et son traitement," *Lyon Méd.*, May 23rd, 1893.
- (4) "Hernies de l'appendice vermiculaire," *Arch. f. klin. chir.*, 1893, xlv, p. 892.
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ROBERT W. DUNN.

STUDENTS' UNION.

RUGBY FOOTBALL CLUB.

RESULTS.

November 25th: Bart.'s v. Devonport Services. Away, lost, 20-7.
 ,, 27th: Bart.'s v. R.N.E.C., Keyham. Scratched.
 December 2nd: Bart.'s v. Rosslyn Park. Home, drawn 0-0.
 ,, 6th: Bart.'s v. R.M.A., Woolwich }
 ,, 9th: Bart.'s v. Northampton } Scratched.
 ,, 16th: Bart.'s v. Old Paulines. }
Record.—Played 14, won 3, drawn 2, lost 9. Points for, 70; against, 108.

UNITED HOSPITALS RUGBY FOOTBALL CLUB.

Challenge Cup Draw, 1934.

1st Round.	2nd Round.	Semi-Finals.	Final.
1. Bye	U.C.H.	Tues.,	Thurs., Mar. 1 Wednesday, Mar. 14.
2. Bye	St. Thomas's	Feb. 13	
3. Bye	Charing Cross	Tues., Feb. 20	
4. St. Bart.'s			
5. King's			
6. St. George's			
7. Guy's			
8. London			
9. Westminster			
10. Bye	St. Mary's	Thurs., Feb. 8	Tues., Feb. 27
11. Bye	Middlesex		

ASSOCIATION FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL v. OLD WYKEHAMISTS.

Played at Winchmore Hill on Saturday, November 25th.

In the early stages of the game the opposing team did not appear to be as formidable as the final score of 6-2 in their favour might suggest. The Old Wykehamists' centre-half opened the scoring with a magnificent hard shot into the corner of the net from 20 yards' range. Shortly afterwards they added another goal by a close-in shot from their inside-right. It was now the Hospital's turn to attack, and, as a result of a fast *mêlée* in their goal-mouth, Royston defeated the goalkeeper with a fast volley into the corner. Before half-time the Old Wykehamists added another goal, which gave them the lead by 2 goals. In the second half the Old Wykehamists played together very much better and added three goals to their score. Their outside left dribbled up the field, and after cutting in past our first line of defence, scored with a very hard shot which gave McKane no chance. The Hospital retaliated and scored through Brownlees, who, following up well, succeeded in reaching the ball before the goalkeeper. The end of the game came with no further scoring. The Old Boys were by far the better side judging from the play, and thoroughly deserved to win.

Final score: Bart.'s, 2; Old Wykehamists, 6.

Team.—J. O. McKane (goal); A. H. Hunt, G. Herbert (backs); J. W. H. Waring, D. R. S. Howell, W. M. Maidlow (halves); R. G. Gilbert, P. A. K. Brownlees, G. R. Royston, R. Shackman, R. C. Dolly (forwards).

ST. BARTHOLOMEW'S HOSPITAL v. OLD BRENTWOODS.

Played at Winchmore Hill on Saturday, December 9th.

This match proved to be a very interesting one. Both sides attacked from the start, but Old Brentwoods were the first to score, through their inside left. In a few minutes Bart.'s equalized by a long shot almost from the halfway line by Waring. The goalkeeper came out a few yards to catch the ball, but misjudged it, with the result that the ball bounded at an angle over his head into the goal. The Old Brentwoods then scored again. After the interval Bart.'s gained the mastery of the game and scored twice through Dolly, who had cut in from the wing to receive a good centre from Nicholson on the right wing, and Brownlees, who scored from close in. During the last two minutes of play the Old Brentwoods forced three corners in succession, and very nearly managed to save the game, but Bart.'s, packing their goal, were able to retain their one goal lead to win the match 3-2.

Team.—J. O. McKane (goal); A. H. Hunt, G. Herbert (backs); J. W. B. Waring, D. R. S. Howell, J. D. Ogilvie (halves); C. Nicholson, P. A. K. Brownlees, G. R. Royston, R. Shackman, R. C. Dolly (forwards).

ST. BARTHOLOMEW'S HOSPITAL v. OLD FORESTHILLIANS.

Played at New Eltham on Saturday, December 16th.

Owing to the dry and frosty weather the ground for this match was very hard. The Old Foresthillians were handicapped throughout the game by playing with one player short. From the start there could have been little doubt what the ultimate result would be. Bart.'s were constantly attacking in the first half, and Brownlees opened the scoring from close in. Shortly afterwards Howell took a magnificent shot which hit the cross-bar in the corner of the goal, just failing to find the net. The Foresthillians made a good clearance from a corner, and their left wing took the ball up the field and, cutting in, scored their first goal. Just before half-time Bart.'s scored their second goal through Dransfield, who neatly headed the ball into the far corner of the net. In the early stages of the second half the Hospital's play became very ragged, and the opposing side broke through on several occasions, their left wing being outstanding. They scored a second time through their inside right, but then Bart.'s attacked to the end, with Carey giving the Hospital a clear lead by scoring twice. Thus the whistle went with the score 4-2 in the Hospital's favour.

For Bart.'s, Carey, Maidlow and Hunt played well, Dransfield also playing a good game on the left wing.

Team.—A. G. Cunningham (goal); A. H. Hunt, G. Herbert (backs); J. W. B. Waring, D. R. S. Howell, W. M. Maidlow (halves); C. Nicholson, P. A. K. Brownlees, G. R. Royston, C. J. Carey, C. M. Dransfield (forwards).

RIFLE CLUB.

The Club may be said to have had a very successful first half of the season. The "A" team have won 12 out of their 14 matches shot, and the "B" team 4 out of 6.

The following are the detailed results of matches to date:

Inter-Hospital Cup League.

(Shoulder-to-shoulder Matches.)

ST. BARTHOLOMEW'S HOSPITAL v. GUY'S HOSPITAL.

A shoulder-to-shoulder match shot at St. Bartholomew's on October 26th. Result, Bart.'s won by 28 points.

Scores:

ST. BARTHOLOMEW'S.	GUY'S.
J. S. Bailey 98	A. Black 91
D. O. Davies 98	R. A. Johnson 97
J. E. Underwood 98	F. J. C. Mathews 91
G. C. Brentnall 97	R. F. Parfit 92
J. Dalziel 97	D. W. Harvey 92
W. R. Grant 95	W. T. Fowler 92
Totals 583	555

St. Bart.'s, 585, v. St. Mary's, 479. Won by 106 points.

Unfortunately only five out of a full team of six turned up to shoot for St. Mary's.

Engineer's Cup League.

Matches shot, 6; won, 5; lost, 1; drawn, 0; points, 10. Aggregate 2348.

Bart.'s are at the head of this League, in which eight teams compete, with a lead of 2 points, and are 11 points ahead of the next best aggregate score.

ST. BARTHOLOMEW'S HOSPITAL v. NORTHAMPTON ENGINEERING COLLEGE.

St. Bart.'s, 388; Northampton Engineering College, 371. Won by 17 points.

Scores: J. S. Bailey 99, D. O. Davies 98, W. H. Cartwright 97, W. R. Grant 94.

ST. BARTHOLOMEW'S HOSPITAL v. ST. THOMAS'S HOSPITAL.

St. Bart.'s, 393; St. Thomas's, 387. Won by 6 points.

Scores: W. H. Cartwright 100, J. S. Bailey 97, D. O. Davies 98, G. C. Brentnall 98.

ST. BARTHOLOMEW'S HOSPITAL v. IMPERIAL COLLEGE.

In the match against Imperial College, Bart.'s put up the record score of 397 out of 400, as follows:

J. S. Bailey, 100; W. H. Cartwright, 99; D. O. Davies, 99; J. E. Underwood, 99.

City of London Rifle League.

"A" Team:	Matches shot.	Won.	Lost.	Drawn.	Points.	Aggregate.
	6	5	1	0	10	3524
"B" Team:	Matches shot.	Won.	Lost.	Drawn.	Points.	Aggregate.
	6	4	2	0	8	3426

St. Bart.'s "A", 580; Johnson's Works, 579. Won by 1 point.
St. Bart.'s "A", 589; Dartford Police, 579. (W. H. Cartwright scored 100.) Won by 10 points.

St. Bart.'s "B", 564; West Ham "B", 563. Won by 1 point.
St. Bart.'s "B", 572; Twickenham, 574. Lost by 2 points.

In the match against Hendon and Cricklewood the "A" team put up the Club record score of 591 out of 600, as follows:

J. S. Bailey, 99; W. H. Cartwright, 99; D. O. Davies, 99; W. A. Owen, 99; J. E. Underwood, 98; G. E. Soden, 97.

A spoon competition, open to new members of the Club only, was won by K. W. Donald. Score 95 + 5 = 100.

The Bell Medal was won by W. H. Cartwright, with an aggregate of five best scores = 499; average = 99.8.

J. D.

HOCKEY CLUB.

ST. BARTHOLOMEW'S HOSPITAL v. ST. MARY'S HOSPITAL.

Played on Saturday, October 28th. Won, 10—1.

The play throughout showed Bart.'s definitely superior, and though the team was by no means at full strength, we managed to confine nearly all the play to our opponents' half.

Little can be said as a detailed account of the game, except that starting very quickly with a goal from Blackburn, four more goals were added by Blackburn again, Sharpe, Heasman and Taylor. The forward line was working together well and making good use of their wings, and with Taylor supporting well at centre-half, our attack, for once, quite definitely shone.

The second half was played at a rather slower pace, but a further five goals were added by Heasman and Blackburn. It was in this half that the value of the flick-shot was seen, the former using this shot from both "near in" and the edge of the circle very successfully. It is quite possible that of an analysis of goals scored during any season the greater percentage would be found to be through that shot.

The game was watched by our President, Dr. Gow, who, although choosing a more than usually inclement afternoon, could not but have been pleased with the decisiveness of the victory. Our thanks are due to him for his support.

Team.—J. L. D. Roberts (*goal*); P. M. Wright, W. A. Oliver (*backs*); A. H. Masina, L. Taylor, R. H. Jayes (*halves*); P. G. Hill, L. Heasman, A. D. Sharpe, G. Blackburn, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL v. WORCESTER COLLEGE, OXFORD.

Played on Saturday, November 11th. Won, 5—1.

This was a more than usually enjoyable game, which produced some very fast and clean hockey. The team played very much better than in the preceding matches, and though the score may have been a little bit flattering, quite definitely deserved to win.

Worcester started with nine men only, and for the first five minutes successfully held their own. However, with the arrival of the missing couple Bart.'s slowly managed to get the upper hand. Following some strong attacking movements, Sharpe scored off a rising ball with a remarkable back-hand shot (1—0). Play swung from end to end, and eventually, after a short tussle, Worcester scored, though through no fault of our own goal-keeper (1—1). This was, however, quickly replied to, through a goal from Martin, who, gathering a pass well from Lockett, easily beat their goal-keeper (2—1). Before half-time Sharpe managed to add a further goal (3—1).

After half-time the Worcester defence rather broke down, and it was only some good goal-keeping which kept Bart.'s from scoring several times. However, their backs were playing to square, and Lockett, coming in to receive a through pass from Martin, caught their defence quite unawares, to score (4—1). Shortly afterwards Sharpe ended a really enjoyable game by scoring with a very good high flick-shot (5—1).

Team.—J. L. D. Roberts (*goal*); P. M. Wright, A. D. Messent (*backs*); R. H. Jayes, L. Taylor, B. Thorne-Thorne (*halves*); H. Williamson, A. D. Sharpe, K. W. Martin, G. Blackburn, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL v. TULSE HILL II.

Saturday, November 18th. Lost, 9—0.

The Hospital started without their centre-half, and for the first fifteen minutes had to struggle desperately against a strong side, who, concentrating on the unmarked wing, managed to score four goals without reply. However, now at full strength, Bart.'s managed to hold their opponents and to attack, Martin having some very bad luck. Two short corners were awarded to us, but unavailing. Half-time came with one more goal added against us (5—0).

The second half saw many attacking movements from the Hospital, but always they just failed to score, while at the other end, Roberts in goal seemed to lose confidence and made many mistakes, four more goals being scored against us (9—0). The last few minutes, however, saw some sterling defence, Wright clearing with beautiful precision, especially to the right wing. The whistle was blown for time without further score.

Team.—J. L. D. Roberts (*goal*); P. M. Wright, W. A. Oliver (*backs*); A. H. Masina, J. R. Winter, B. Thorne-Thorne (*halves*); H. Williamson, L. Heasman, K. W. Martin, J. Blackburn, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL v. SURBITON II.

Saturday, December 9th. Drawn, 3—3.

Played on a stony hard pitch, good hockey was out of the question, but the game was nevertheless played at a very fast pace throughout. Bart.'s started off attacking strongly, and for the first twenty minutes it looked as if the issue was going to be beyond doubt. It was, however, Surbiton who scored first through a push-shot which somehow bumped its way over the frozen ground into the goal-mouth (0—1). The state of the ground was extremely difficult for the goal-keepers, and Grundy, making his first appearance in the 1st, made no mistakes for which he could rightly be blamed.

Play, however, transferred itself into our opponents' half, and following some open play, Blackburn replied for the Hospital (1—1). Then ensued some breathless moments for Surbiton, which resulted in Martin scoring from a long corner (2—1). Through some hard long passing Surbiton managed to attack in their turn and replied very quickly with two goals (2—3).

After half-time both sides exchanged a series of attacks with the Hospital pressing for the greater part, and equalizing ten minutes before time through Blackburn (3—3).

Team.—T. N. Grundy (*goal*); W. A. Oliver, P. M. Wright (*backs*); A. H. Masina, J. R. Winter, B. Thorne-Thorne (*halves*); P. G. Hill, J. Blackburn, K. W. Martin, L. Heasman, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL v. ROYAL NAVAL COLLEGE, GREENWICH.

Saturday, December 16th. Lost, 1—0.

The pitch was again frozen hard, but being very even, gave a comparatively smooth surface. Playing without a goalkeeper the whole team rose to the occasion extremely well and actually had quite as much of the game as the R.N.C.

Bart.'s started very strongly, and working well through Blackburn and Hill on the right wing managed to keep up a continuous attacking pressure, one shot of Hill's especially coming within an ace of success. It is very probable that if only the other inside forwards had followed up many of the shots, scoring would have been inevitable. However, the Navy gradually moved to the other end and gave Wright and Messent ample opportunity to effect spectacular saves—both played magnificently, and although with no goal-keeper to support them, rarely failed to find one of our forwards in their clearances.

It was early in the second half that the R.N.C. managed to score through a hard first-time shot (0—1). However, with Winter marking back well their forwards were by no means on top. Excellent runs by Hill, who was very fast on the frozen ground, gave our inside forwards many chances, but without avail, and time was blown after a well-umpired and enjoyable game.

Team.—A. D. Messent, P. W. Wright (*backs*); A. H. Masina, J. R. Winter, P. H. Jayes (*halves*); P. J. Hill, J. Blackburn, K. W. Martin, L. Heasman, J. M. Lockett (*forwards*).

ATHLETIC CLUB.

At the Annual General Meeting of the Club held on November 2nd the following were elected officers for the season 1934:

President: Mr. T. H. Just.

Vice-Presidents: Prof. Gask, Mr. H. B. Stallard, Sir Charles Gordon-Watson, Mr. W. E. Underwood, Mr. J. P. Hosford, Prof. Kettle, Mr. H. W. Rodgers.

Captain: J. W. Perrott.

Hon. Secretary: C. M. Dransfield.

Assistant Hon. Secretary: G. A. Ackeroyd.

Committee: K. W. Martin, W. H. Jopling, G. D. Wedd, J. G. Youngman, J. G. Nel, C. P. Reilly, K. O. Black, G. Dalley.

Honours for the 1933 season were awarded to the following: J. G. Nel, C. P. Reilly, W. H. Jopling, G. D. Wedd, E. E. Harris, J. Shields, G. A. Ackeroyd, J. G. Youngman, T. P. Storey, J. R. Strong, J. Smart, K. W. Martin, H. W. Rodgers, K. O. Black, and C. M. Dransfield.

Cross-country: G. Dalley, K. O. Black.

UNITED HOSPITALS' HARE AND HOUNDS.

MATCH v. LLOYDS BANK.

This, our first match of the season, was run in Richmond Park, from our old headquarters. Lloyds, as usual, turned out a strong team, but the Hospitals packed very well to win by the odd point.

It is very gratifying to see the Hospitals packing well so early in the season.

As to the race itself, Stansbury (Bank) went away at the start, accompanied by Fowle (Bank), Black, Williams and Dalley, all of Bart.'s, and Price (Middlesex). Fowle waited to try and pull another Bank man up to the front, but finding the pace too hot, returned to run with Stansbury, the two of them leading the whole way to win comfortably. Williams, a very promising freshman, tried to hold them, but had to drop back and run with Black and Dalley, Price being close behind. The Hospital's representatives finished in that order, the fifth scoring man being Turner (Guy's).

Result.—(1) A. C. Stansbury and E. Fowle (Lloyds Bank), (3) K. O. Black and G. T. S. Williams (U.H.H.H.), (5) G. Dalley (U.H.H.H.), (6) A. E. K. Price (U.H.H.H.), (7) F. Clarke (Lloyds Bank), (8) J. Turner (U.H.H.H.).

U.H.H.H.: 3, 4, 5, 6, 8 = 26.

Lloyds Bank: 1, 2, 7, 9, 10 = 29.

MATCH V. THAMES HARE AND HOUNDS.

Our old friends, the Thames Hare and Hounds, entertained us at Rochampton, and, although they had held their annual dance the night before, turned out to be surprisingly fit. We had quite a strong team out, and yet they just managed to win, scoring five a-side.

Everybody started off fast, but Etheridge, a young and promising runner from Guy's, went ahead from the start, and in spite of strong challenges from various members of the Thames, retained his lead to win comfortably by 300 yards. Behind him, Kensit (Thames) and Black (Bart.'s) were having a great tussle for second place, Kensit drawing ahead at the end, but Black managed to stave off the challenge of another old Cambridge runner, Lawton, to finish a good third. Behind Hospitals' men were having individual tussles with Thames men; sometimes one prevailed and sometimes the other.

Results.—(1) A. E. Etheridge (U.H.H.H.), (2) M. F. Kensit (Thames), (3) K. O. Black (U.H.H.H.), (4) C. Lawton (Thames), (5) P. M. Smyth (U.H.H.H.), (6) J. T. Race (Thames), (7) H. C. Harley and A. Stebbing (Thames), (8) H. G. Smith-Sparkes (Thames).

Thames H. and H.: 2, 4, 6, 7, 8 = 27.

U.H.H.H.: 1, 3, 5, 9, 10 = 28.

CORRESPONDENCE.

To the Editor, 'St. Bartholomew's Hospital Journal'.

DEAR SIR,—I am somewhat hesitant in joining with those who venture views on medical education, but I feel that "the Student's Point of View" set out in the December number calls for comment from another aspect of student mentality.

The principal points were four in number: the fault of what your contributor calls "pure science" methods of teaching carried on by those out of touch with clinical practice; the suggestion that the syllabus is overburdened with relatively unimportant minor points; the advisability of augmenting the teaching of psychology; and lastly the unfairness and inadequacy of examination methods.

While agreeing with the suggestion that a greater contact with clinical practice is desirable, I feel it should be pointed out that physiology as taught in this medical college has been, for some years, "illustrated" by clinical cases from the wards, demonstrated by members of the visiting staff. I myself have vivid recollections of such demonstrations of endocrine and cardiac disturbances. Also, a representative group of students from the Anatomical Department was recently observed receiving tuition in the post-mortem room. Further, surely it is evident that those responsible for teaching practical physiology, anatomy and pharmacology, far from being "all too often, pure scientists", are for the most part actively engaged in clinical work at this Hospital or elsewhere.

With regard to the syllabus, in taking your contributor's example, I venture to suggest that an intelligent study of such a structure as the otic ganglion and its connections must, of necessity, include a study of the anatomy of the temporal and pterygoid regions, and the physiology of the salivary glands—subjects of no mean importance, even in general practice. The essentials of any science are more certainly assimilated by a study of details. [Surely this is the secret of such examinations as the Primary Fellowship.]

On the matter of psychology, the practical aspect has already

been discussed, and a worthy pronouncement given in the correspondence in the August number of the JOURNAL. However, a course of lectures entitled "An Introduction to the Psychoneuroses" is delivered regularly at the Institute of Medical Psychology; the fee is moderate (10s. 6d. to students), and the course is advertised on the College notice-boards; any student with an appetite for such knowledge will find his need well satisfied therein, and the lectures are designed for the very purpose mentioned by your contributor.

The two types of examination candidate mentioned are clearly the very ones whose capabilities it is desired to reveal. The one is a man "overwhelmed" whose mind becomes a blank when asked a simple question—is he suited to the practice of medicine? Surely he should be ploughed, irrespective of the amount of knowledge packed away in his cerebrum, or wherever the "pure scientists" would have it stored. The other candidate can absorb facts with great rapidity, and arrange them in his mind in a fashion orderly enough for application to the momentous situation confronting him.

Finally, your contributor would have an "impersonal method of examination". As one who finds work for work's sake, a frank impossibility, I would advocate the preservation of the present examination system, if only as a stimulating menace.

I remain, Sir,

Yours faithfully,

D. F. ELLISON NASH
(Londonian).

St. Bartholomew's Hospital,
December 28th, 1933.

P.S.—If anyone is still desirous of a further pursuit of this subject, I would refer him to a comprehensive survey by Lord Horder, reported in *St. Mary's Hospital Gazette*, June, 1933.

REVIEWS.

A PSYCHOLOGIST'S POINT OF VIEW. Twelve semi-popular addresses on various subjects. By CHARLES S. MYERS, C.B.E., F.R.S. (William Heinemann [Medical Books] Ltd., 1933.) Pp. vii + 203.

These addresses, seven of which have appeared in periodicals as widely different in their scope as the *Lancet*, *Economica*, and *The British Journal of Psychology*, cover a large range of the subjects in which a psychologist may be interested. The author on his way examines, criticizes or comments on such a variety as anthropology, economics, music, religion, education, sociology and Freudian psychology. Of course it is impossible for us in our turn to criticize his point of view, for his subjects are, in the main, those on which there still rests the mists of controversy and each reader's opinion would vary with his beliefs.

Dr. Myers has spent some time in studying the customs and psychology of primitive peoples, and, more lately, as Principal of the National Institute of Industrial Psychology, he has had close contact with the problems of modern civilization. The addresses make extremely interesting reading, and the statements supply stimulating food for thought. When, however, he treats of prayer, religious experience and kindred subjects he treads on dangerous ground, and, as always, the tendency is to speak only with the voice of a single individual's opinion. One is reminded of John Locke's rebuke to man when "his narrow weak faculties could reach no further than the observation & memory of some few effects produced by visible and external causes but in away utterly out of the reach of his apprehension, . . . man still affecting something of a deity labour to make his imagination supply what his observation failed him in, & when he could not discover the principles & causes & methods of natures workmanship, he would need fashion all these out of his own thought, & make a world to himself, framed & governed by his own intelligence".

Nevertheless, the book is illuminating, and deserves to be read by the medical thinker, dealing as it does with subjects that must always loom large on his horizon.

A SHORT ENCYCLOPÆDIA FOR NURSES. By EVELYN C. PEARCE, Sister Tutor, The Middlesex Hospital. (Faber & Faber, Ltd., 1933.) Pp. v + 625. Price 12s. 6d. net.

The production of an encyclopædia is always attended by difficulties. These are accentuated in the case of medicine, and more

so even when they are intended for nurses. There is always a temptation to be too expansive, and to attempt to teach all the facts of diagnosis and treatment. The authoress has succeeded here in avoiding these pitfalls and, besides dealing with everything that a nurse can possibly need to understand, she has produced an accurate, concise statement of the main facts in each description. The omission of illustrations is a wise step. The choice of thin paper and arrangement of the matter has produced a book that is less bulky than most textbooks.

Miss Pearce has incorporated the information she has found useful in revision classes for candidates in the Final State examination: stressing, of course, procedures that concern the nurse especially, such as pre-operative preparation, diet, child welfare, etc., while enough is told of the principles of diagnosis and treatment to make the reader thoroughly conversant with the meaning of her work.

The book is an extremely useful one, and should be invaluable to a nurse from the beginning of her training.

A DOCTOR TO A MOTHER: THE MANAGEMENT OF MATERNAL AND INFANT HEALTH. Wireless talks by EARDLEY HOLLAND, F.R.C.S., F.R.C.P., F.C.O.G., R. C. JEWESBURY, M.D.(Oxon.), F.R.C.P., WILFRID SHELDON, M.D., F.R.C.P. (London: Edward Arnold & Co., 1933.) Pp. 96. Price 1s. 6d. net.

This little book deals with the care and management of the health of mother and child through pregnancy until the second year of the baby's life. The authors have been chosen for their knowledge and experience, and they have produced advice simple and explicit enough for the most ignorant reader. Besides containing excellent propaganda for antenatal and welfare clinics, there is much that helps to solve the problems and lighten the difficulties of this anxious time. Each author describes, from the patient's point of view, the details of preparation, feeding, weaning, treatment and general management.

The talks can be safely recommended by the medical attendant or nurse to every expectant mother to supplement professional instruction, as sympathetic in their outlook and practical in their advice.

ACTINOTHERAPY TECHNIQUE. With a Foreword by Sir HENRY GAUVAIN, M.D., M.Chir.(Camb.), F.R.C.S.(Eng.). (Slough: The Sollux Publishing Co.) Pp. 168. Figs. 3. Price 6s. net.

Much has been written lately in medical literature on the effects of actinotherapy in very many varied conditions, and the average practitioner is still unfamiliar with the technique. This book collects all the information available.

There are two main parts, the first concerning technique, physics and dosage, the second, an alphabetical list of all the conditions where this form of therapeutics has been recommended, with abundant international references and details of treatment.

The book has special reference to the Sollux, Kromayer, Hanovia and Alpine Sun types of apparatus, but in spite of this is absolutely free from advertising matter.

Sir Henry Gauvain considers the work "indispensable to all engaged in the practice of actinotherapy", and pays tribute to the compilers' diligence in their compilation. From every point of view this is a most useful *vade-mecum* for the practitioner, especially as the lamp is becoming an almost indispensable unit in his equipment.

ROSE AND CARLESS'S MANUAL OF SURGERY. By C. P. G. WAKELEY, D.S.E.(Lond.), F.R.C.S.(Eng.), F.R.S.(Edin.), and T. B. HUNTER, M.C., M.Chir.(Cantab.), F.R.C.S.(Eng.). Fourteenth edition. (London: Baillière, Tindall & Cox, 1933.) Pp. viii + 1487 (+ index pp. 60). In one or two volumes. Price 30s. net or 15s. per volume.

So long has this text-book been in the forefront of its kind that little can be said to make it more familiar. The fact that it has had fourteen English editions and several in America, China, Japan and Hungary shows that it is generally taken as representative of the best that there is in the teaching of British surgery.

This edition is notable in many ways. It is the first produced without the active co-operation of Prof. Carless. The publishers have, for the first time, brought out two volumes as well as the old single volume, which is just too bulky to be convenient. They have also used a "high surfaced" paper, enabling the text to be interspersed with the skiagrams that have hitherto been gathered into an appendix, and a large number of excellent illustrations have been added, bringing the total almost to one for every leaf of text. Over three hundred have been added or exchanged for less clear figures

and photographs, in every case with great advantage. There are also eight new and four redrawn coloured plates. The artists are to be congratulated on their work.

In spite of many additions to the text the new edition is smaller than the last by nearly fifty pages—and this with the inclusion of much new matter. The first eight chapters on Bacteriology, Inflammation, Infection, Tumours, etc., have been curtailed and rewritten by Dr. Carnegie Dickson; five on the Ear, Respiratory Tract and Esophagus by Mr. V. E. Negus. Other chapters have been similarly revised—Anaesthesia by Dr. Hadfield; Ophthalmic Surgery by Mr. N. B. Harman; Gynaecology by Mr. Eardley Holland; Tropical Surgery by Sir Frank Comor. A chapter on Thoracic Surgery has been completely rewritten to keep pace with modern opinion.

TEXTBOOK OF PATHOLOGY. By ROBERT MUIR, M.A., M.D., Sc.D., LL.D., F.R.S. Third edition. (London: Edward Arnold, 1933.) Pp. vii + 957. Figs. 546. Price 35s. net.

This work, "intended primarily as a textbook for students of medicine", has also come to be regarded as a standard book of reference on pathology by all branches of medicine. This speaks highly of the accuracy and detail of its contents, and the appearance of a new edition in so short a time is an indication of the author's desire to incorporate every recent advance in the study of his subject.

Popular as it is among students, several turn to less instructive, more assimilable text-books on account of the difficulty in extracting that minimum of information required for examination purposes. Certainly the appearance of whole unbroken pages of small type seems very formidable, but with a little patience the art of "reading Muir" is easily acquired, and we cannot see how such a vast array of facts could be presented in any other way that would not sacrifice detail for simplicity.

There have been no drastic alterations in this edition, but the new matter has been incorporated where necessary. This has entailed a large amount of rewriting, the addition of eighty pages to the text, and the use of a smaller type. Some rearrangement has been found necessary, and various additions and modifications and classifications have been made—for example, in certain aspects of the morbid histology of brain tumours, nervous tissues, renal and cardiac disease. Forty-five new illustrations appear, and the index has been rewritten and enlarged.

The book still remains one to be recommended to all both for reference and for study as presenting all the established facts and the recent advances in an all-important subject.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

ADAMSON, H. G., M.D., F.R.C.P. "Erasmus Wilson: His Predecessors and his Contemporaries." *British Journal of Dermatology and Syphilis*, November, 1933.

BALLINGALL, D. C. G., M.C., R.A.M.C. "An Obscure Lung Case." *Journal Royal Army Medical Corps*, November, 1933.

BROWN, W. LANGDON, M.D., F.R.C.P. "How do Drugs Act?" *British Medical Journal*, December 2nd, 1933.

BURROWS, H. JACKSON, M.B., F.R.C.S. "Tissue Culture in its Relationship to Surgical Pathology." *Lancet*, October 28th, 1933.

CARMICHAEL, E. ARNOLD, M.D., F.R.C.P. See WOOLLARD and CARMICHAEL.

CHOPRA, R. N., M.D., I.M.S. (and MUKHERJEE, B., and CAMPBELL, H. G. M.). "The Pharmacological Action and Anti-Malarial Properties of Anhydrocotarnine-Resorcinol-Hydrochloride (A Derivative of Narcotine)." *Indian Journal Medical Research*, October, 1933.

— (and GUPTA, J. C., and MUKHERJEE, B.). "The Pharmacological Action of an Alkaloid Obtained from *Rauwolfia serpentina*, Benth.: A Preliminary Note." *Indian Journal Medical Research*, October, 1933.

— (and CHAUDHURY, S. G.). "On the Electric Change of Erythrocytes. Part II: Malaria." *Indian Journal Medical Research*, October, 1933.

— (and GUPTA, J. C., and CHOPRA, G. S.). "Pharmacological Action of Kurchicine (An Alkaloid of *Holarhena anti-dysenterica*)." *Indian Journal Medical Research*, October, 1933.

- CLAXTON, E. E., M.B., B.S., D.T.M.&H. (and BURDEKIN, LUCY). *Diabetes: Reasons and Recipes. With a foreword by George Graham, M.D., F.R.C.P.* London: John Lane, The Bodley Head, 1933.
- COCKAYNE, E. A., D.M., F.R.C.P. "Congenital Steatorrhœa." *Lancet*, November 11th, 1933.
- DUNDAS-GRANT, Sir JAMES, K.B.E., M.D., F.R.C.S. "Cases of Aural Vertigo Amenable to Treatment by Ossiculectomy." *Lancet*, November 4th, 1933.
- GILLIES, Sir HAROLD, C.B.E., F.R.C.S., and McINDOE, A. H., F.R.C.S. "The Late Surgical Complications of Fracture of the Mandible." *British Medical Journal*, December 9th, 1933.
- GRIFFITHS, H. ERNEST, M.S., F.R.C.S. "Painful Constipation." *Practitioner*, December, 1933.
- HAMMOND, T. E., F.R.C.S. "The Constitutional Factor in Health and Disease." *Clinical Journal*, November, 1933.
- HEALD, C. B., C.B.E., M.D., M.R.C.P. "The Physical Treatment of Constipation." *Practitioner*, December, 1933.
- HILTON, REGINALD, M.D., F.R.C.P. "Some Effects of Artificial Pneumothorax on the Circulation." *Journal Pathology and Bacteriology*, vol. xxxvii, 1933.
- "The Action of Artificial Pneumothorax on the Lymphatics of the Lung." *Proceedings of the Royal Society of Medicine*, July, 1933.
- "A Mouthpiece for Collecting Expired Air in Dyspnoea." *Journal of Physiology*, vol. lxxviii, 1933.
- HORDER, Lord, K.C.V.O., M.D., F.R.C.P. "Eugenics—and the Doctor." *British Medical Journal*, December 9th, 1933.
- JORDAN, ALFRED C., C.B.E., M.D., M.R.C.P. "Chronic Skin Troubles of Toxæmia Origin." *Practitioner*, November, 1933.
- McINDOE, A. H., F.R.C.S. See Gillies and McIndoe.
- MYERS, CHARLES S., C.B.E., M.D., D.Sc., F.R.S. "A Psychological Regard of Medical Education." *Lancet*, November 11th, 1933.
- NAPIER, L. EVERARD, M.R.C.S., L.R.C.P. (and SMITH, R. O. A., and KRISHNAN, K. V.). "The Transmission of Kala-azar to Hamsters by the Bite of the Sandfly (*Phlebotomus argentipes*)." *Indian Journal Medical Research*, October, 1933.
- (and SMITH, R. O. A., and KRISHNAN, K. V.). "The Relative Infectivity of the Two Forms of *Leishmania donovani* Administered by Different Routes." *Indian Journal Medical Research*, October, 1933.
- RAVEN, R. W., F.R.C.S. "Stenosis of the Oesophagus." *Post-Graduate Medical Journal*, November, 1933.
- ROLLESTON, Sir HUMPHRY, Bart., G.C.V.O., K.C.B., M.D., F.R.C.P. "Medicine and Literature: Lloyd Roberts Lecture." *British Medical Journal*, November 25th, 1933.
- SHAW, WILFRED, M.D., F.R.C.S., F.C.O.G. "The Pathology of Ovarian Tumours (Part VI)." *Journal of Obstetrics and Gynaecology British Empire*, December, 1933.
- "Deep Transverse Lie of the Head." *Practitioner*, December, 1933.
- SLOT, GERALD M., M.D., M.R.C.P., D.P.H. "The Treatment of Sciatica." *Practitioner*, November, 1933.
- (and McDADE, R. S., M.B.). "Chorea Treated with Evipan Sodium." *Lancet*, November 4th, 1933.
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- (and WEISSWANGE, W., M.D.). "Simple Achlorhydric Anæmia in Adult Males." *British Medical Journal*, December 9th, 1933.
- WOOLLARD, H. H., M.D. (and CARMICHAEL, E. ARNOLD, M.D., F.R.C.P.). "The Testis and Referred Pain." *Brain*, vol. lvi, Pt. 3, 1933.

CHANGES OF ADDRESS.

- CHOLMELEY, M. A., 43, Upper Richmond Road, S.W. 15.
- CLARK, E. M., Burao, British Somaliland, *via* Aden.
- DRAWMER, C. S., 1, The Crescent, Wisbech, Cambridgeshire.
- FISHER, J. F., Stolkwell House, Melksham, Wiltshire.
- GILDING, H. P., Shelfield House, near Alcester, Warwickshire.
- JEUDWINE, Lt.-Col. W. W., I.M.S. (ret.), "Lochaber", Field End Road, Eastcote, Middlesex.

- LIESCHING, A. C., High Field, Queens' Road, Ryde, Isle of Wight. (Tel. Ryde 386.)
- MALEY, M. L., 15, Victoria Avenue, Southend-on-Sea. (Tel. Southend 2931.)
- RHODES, R. L., Wiasterholme, The Esplanade, Grange-over-Sands. (Tel. Grange 108.)
- THOMAS, G. WYNNE, Aldermaston, Berkshire. (Tel. Woolhampton 13.)

APPOINTMENTS.

- KNOX, J. S., M.R.C.S., L.R.C.P., appointed Junior Deputy Medical Superintendent of Broadmoor Criminal Lunatic Asylum.
- PALMER, C. SPENCER, M.R.C.S., L.R.C.P., appointed Honorary Consulting Physician to the British Legion Village and Sanatorium for Tuberculous Ex-Service Men, Preston Hall, near Maidstone, Kent.

BIRTHS.

- BUNCOMBE.—On December 7th, 1933, at Surrey Street Nursing Home, Norwich, to Grace, wife of Dr. G. H. Buncombe, Gorleston, Suffolk—a son.
- OAKLEY.—On December 6th, 1933, to Dr. and Mrs. Wilfrid Oakley (Hermione, *née* Wingate-Saul)—a son.
- OKELL.—On December 25th, 1933, at Winsford, Cheshire, to Hilda Margaret, wife of Dr. Robert Okell—a daughter.
- SPARKS.—On November 26th, 1933, at 27, Welbeck Street, to Dorothy (*née* Gudgeon), wife of Dr. J. V. Sparks—a son (Harry Hougham).
- WILSON.—On December 15th, 1933, at 45, High Street, Harrow-on-the-Hill, to Ruth, wife of Dr. Henry Wilson—a son.

MARRIAGE.

- BUCKLAND—DODDS.—On November 25th, 1933, at the North Sea Hotel, Arbroath, by the Rev. J. Spence Cuthill, Parish Minister of Arbroath, Dr. Henry Scott Buckland, of Kia Toa Draichin, New Zealand, son of the late Mr. Henry Buckland and of Mrs. Tillard, Bournemouth, to Helen Margaret, second daughter of Henry W. Dodds and the late Mrs. Dodds, Warslap, Arbroath.

DEATHS.

- BLANDFORD.—On December 14th, 1933, suddenly, at Palma Mallorca, Dr. Joseph John Guthrie Blandford, son of the late Rev. Josias Jessop Blandford, aged 66.
- COMBER.—On December 3rd, 1933, at King's College Hospital, Charles Thomas Thornton Comber, M.D., O.B.E., aged 69.
- COULBY.—On December 4th, 1933, at Woodborough Road, Nottingham, George Arthur Coulby, M.D. (Cantab.), aged 67.
- DRU DRURY.—On November 23rd, 1933, at Corfe Castle, Dorset, Ethel Blanche (*née* Sims), wife of Godfrey Dru Drury, M.R.C.S., L.R.C.P., F.S.A., aged 58.
- EARLE.—On December 4th, 1933, at 47, Woodstock Road, Oxford, John Rolleston Earle, M.A., M.B., aged 69.
- UILLEMARD.—On December 23rd, 1933, at Old Mill House, Trumpington, Dr. F. H. H. Guillemard, aged 81.
- HANDSON.—On December 25th, 1933, at 138, Farnaby Road, Bromley, Kent, C. P. Handson, M.D. (Cantab.), B.Ch., M.A., late of New Cross.
- LANKESTER.—On December 25th, 1933, at his home, 5, Upper Wimpole Street, W. 1, Owen Lankester, M.R.C.S., youngest son of the late Dr. Edwin Lankester, F.R.S.
- NEALOR.—On October 7th, 1933, Lieut.-Col. William Stewart Nealor, I.M.S.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, St. Bartholomew's Hospital, E.C. 1.

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